



Class 1

Book 1

HANDBOOK OF TENNESSEE

Containing descriptive and statistical matter relative
to the resources and products of the State

BY

THOMAS H. PAINE

COMMISSIONER OF AGRICULTURE



NASHVILLE, TENN.
MCQUIDDY PRINTING COMPANY
1903



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OFFICIAL DONATION.

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NOTE

Owing to the limited fund at my command, I have sought to embody in this Handbook only such information as my correspondence and experience have led me to believe would be most useful to those asking for information about the products and resources of the State.

In the preparation of this work, much labor has been expended in collecting information and in culling from the various volumes of the "Reports of the Federal Census for 1900" what I regard as the most important statistical information about the State of Tennessee and about each county in the State; and I have combined it with descriptive matter so arranged that the seeker after information about our resources and our products may find this an accurate and a reliable book of ready reference. It should be borne in mind that the agricultural statistics given for each county, being compiled from the census reports of 1900, were based on the products of what was considered an unfavorable crop year, and, therefore, do not show the full capacity of the State for the various products enumerated.

In the hope that this work may measurably answer the purposes of its publication, it is respectfully submitted.

THOMAS H. PAINE,
Commissioner of Agriculture.

HANDBOOK OF TENNESSEE.

This office receives numerous inquiries from residents and nonresidents of the State asking for information about the resources and the advantages of the State in general, or asking for information about certain localities with a view to seeking homes and making investments. This publication is designed to meet this demand and to disseminate among our own people a better idea of the extent and variety of the resources of the State, in the hope that such information will tend to not only keep more of our own people in the State, but to induce desirable immigrants from other sections to cast their fortunes with us.

In addition to the general descriptive matter and the special articles on particular subjects, the statistical picture of every county in the State, compiled from the census report of 1900, will convey to the mind of the reader a definite idea of what each county is capable of producing and does produce. These facts and figures speak more truthfully, if not more eloquently, than words could tell it the story of the State's progress in every line of industry, while the special articles briefly indicate the splendid opportunities which Tennessee presents to home seekers and capitalists. It is believed that a careful study of the facts herein presented will convince thinking men that the Eldorado of opportunity lies not in the West, but in Tennessee.

POPULATION.

The population of Tennessee in 1900 was 2,020,616, showing an increase over 1890 of 253,098 and an increase over 1800 of 1,901,430.

BRIEF SKETCH.

Tennessee shines like a rich jewel in a magnificent setting. Eight great States touch her borders and emphasize her grandeur. The names of her statesmen and patriots constitute a roll of honor in the history of popular government in the United States. She not only holds a proud position in the nation's history, but a beneficent Providence has endowed her with natural resources and advantages of soil, climate, and conditions which entitle her to rank among the richest and most powerful States of the Union.

The "Father of Waters" sweeps along her western borders, and with its tributaries and those beautiful rivers, the Tennessee and the Cumberland, and their tributaries, she has about 2,700 miles of navigable rivers, furnishing cheap transportation for the rich and varied products of a vast section, rivaling in fertility and productive power the famous valley of the Nile.

More than 3,000 miles of railroads operating within her borders bring her primary markets in touch with the markets of the world and afford to her people transportation facilities equal to those enjoyed by the most favored of her sister States. Still other railroad lines are projected and in process of construction, which will open up vast forests, great coal fields, rich agricultural sections, and give a fresh impetus to her progress and add millions of dollars to her material wealth. The spirit of progress in the matter of good roads is abroad in the State, and the rural free delivery mail service is being rapidly extended, with all the concomitants of progress and enlightenment. The contact with steel rails and electric wires is quickening whole communities into new life, and schools and churches, homes and factories are springing up all along the highways of progress. Yet old as her civilization is, standing as she does in the front rank of educational progress in the South, with all of her schools and churches and facto-

ries, with all of her treasures of mine and field and forest, with all of her railroads and telegraphs and telephones, Tennessee is still in the infancy of her material development. Her great natural resources have scarcely been more than touched. She has the soil, she has the water, and she has the seasons that enable her people to produce at home almost every important crop mentioned in the census schedule and everything that is absolutely essential to the support of an enlightened people. There is no State in the Union where the cost of living, one year with another, is so reasonable, on account of the variety and abundance of her home products. Her people are exempt from the extremes of heat and cold, exempt from the enervating heat of the Gulf States and the bitter blasts of the Eastern Atlantic Coast, exempt from the humid atmosphere of the South Atlantic Coast and the scorching breath of the arid regions of the West. Tennessee is the land of the happy medium. Her mountains and her hills, her table-lands and her valleys are covered with native grasses that fatten vast flocks and herds. The limpid waters gush forth to fructify the soil from beds of coal and iron, marble and granite, and copper and zinc; while untold wealth still lies sleeping beneath the surface of her soil awaiting the touch of the magic hand of industry to bring it to light. Considering her natural advantages and properly estimating her present opportunities, her lands can be secured at comparatively low prices. It requires no seer to see that Tennessee, with her immense coal fields; with mines of iron ore of incalculable value and extent; with the finest marble beds in the world; with her great coke industry; with her vast deposits of phosphate, zinc, barytes, copper, and lithograph stone; with her soil and climate; with her advantages as a stock-growing State; with her great water power; with her rivers and her railroads; with her advantages in agriculture and in manufacturing, must, and will, sooner or later, enter the front rank of the great industrial and commercial States.

Whether this consummation so devoutly to be wished is to be attained within a few years, or to be attained by a later generation, rests with those of us who are now on the stage of action. Our enterprise will achieve it or our lack of enterprise will defer it. If we devote our hands, our brains, and our capital to the work and profit by the example of our competitors in the struggle, we will succeed. First, Tennesseans must know and appreciate the advantages we possess; secondly, Tennesseans must strive to bring to the attention of the world those advantages and invite others to share with us the rich resources that await intelligent enterprise and determined effort.

If we shall address ourselves to the task and use the advantages we possess; if we shall invite immigration and capital as other progressive States are doing, we will soon add to that proud title, "The Volunteer State," that other proud title, "The Empire State of the South."

EDUCATIONAL ADVANTAGES.

In a republic popular education should be the first consideration. With the love of liberty should be coupled the intelligence to preserve it. To this vital essential Tennessee is awake. Her public-school system, imperfect as it is, challenges comparison with that of other States, and "progress" is the watchword. Her private institutions of learning easily place her in the lead of all the Southern States and abreast of the most advanced States of the Union in the matter of educational enterprise.

PRIVATE INSTITUTIONS OF LEARNING.

In every county in the State are private schools, which, taken in connection with the public schools, show an educational interest in the State unsurpassed anywhere. In his report for 1900 the State Superintendent of Public Instruction gives a list of universities, colleges, high schools, training schools, and other private institutions of

learning in the various counties of the State, to the number of 403, headed by such institutions as Vanderbilt University, Nashville; Cumberland University, Lebanon; the Southwestern Baptist University, Jackson; the University of the South, Sewanee; the University of Tennessee, Knoxville; and the Southwestern Presbyterian University, Clarksville. Nashville, the capital city of the State, ranks second as an educational center in the United States.

EDUCATIONAL AND CHARITABLE INSTITUTIONS.

The State supports three magnificent asylums for the insane—at Knoxville, Nashville, and Bolivar—in addition to the Deaf and Dumb School, the Tennessee Industrial School, the Tennessee School for the Blind, and the Confederate Soldiers' Home. These institutions are all well equipped and economically conducted, and they are a source of pride to the people of the State.

TAXATION.

The State tax is: For schools, 15 cents on the \$100 worth of property and 35 cents for other purposes. The county rate is limited to 30 cents on the \$100, though special taxes may be levied for schools and highways.

The assessment for 1902 was 25,259,-

980 acres of land valued at.....	\$173,207.406	
Town lots, valued at.....	124,757.254	
Value of other property.....	49,923,052—	\$347,887,713 00
Assessed value of railroad property.		56,710,396 99
Number of miles of telegraph and telephone lines, 34,107.51; assessed value		1,618,132 74
Total		\$406,216,242 73

Other taxes are collected on privileges.

STATE DEBT.

The State debt in 1900 amounted to \$16,273,600; but since December, 1900, the State has retired \$1,029,200 of the

bonded debt; and with the present rate of taxation and expenditures continued, the debt would continue to be extinguished at the rate of \$400,000 per annum.

NATURAL DIVISIONS.

There are well-defined natural divisions in this wonderfully diversified State, which will be readily recognized by the student of her geography, soil, and climate.

THE UNAKAS.

The Unaka range of mountains forms the eastern border of the State, its loftiest peaks rising 6,000 feet above the level of the sea. The counties of Johnson, Carter, Washington, Greene, Cocke, Sevier, Blount, Monroe, McMinn, and Polk touch upon and are partially included in this range, which covers an area of 2,000 square miles. The smiling valleys and nestling coves in this section are very rich and productive, and the range for stock is good. Mining, stock raising, and agriculture are the principal industries. Iron, copper, marble, and timber are among the valuable products. Corn, wheat, pork, and the grasses are the staple products of the farm.

THE VALLEY OF EAST TENNESSEE.

This valley, viewed from the Unakas, presents a panorama of singular beauty. It is rich in minerals, and is a splendid agricultural country, where grain and grasses, fruits and vegetables yield an abundant revenue to the husbandman. The fertile valleys are watered by numerous streams, while the rainfall and the climate make it an ideal farming country. As a stock-raising section it is unsurpassed. The farmers raise wheat, corn, oats, hay, cattle, horses, mules, hogs, fruit, vegetables, and poultry for the market. It is also a fine country for dairying, and in some portions of it considerable attention is given to this branch of agriculture. Mining and manufactur-

ing industries are multiplying and furnishing larger and better home markets for the products of the soil. No other section of the State enjoys a greater degree of general prosperity than this section: in fact, this may be said of all that grand division of the State known as "East Tennessee."

THE CUMBERLAND TABLE-LAND.

Adjoining this valley on the west lies the Cumberland Table-land, covering an area of 5,100 square miles, rich beyond estimate in coal and iron and bearing upon the surface fortunes in timber and agricultural opportunities. The mountain grasses grow in wild luxuriance, furnishing pasturage enough from April to November to fatten all the sheep and cattle it would require to supply the whole State with meat. Thousands of cattle and hogs annually fatten on the range, requiring no other feed and no care, except to keep them from straying from their owners.

The climate has made this section famous as a summer resort for invalids. It is a fine fruit-growing section. Apples are a sure crop and of unsurpassed quality. Large quantities of this fruit are dried and shipped to market every year. Pears, quinces, grapes, cherries, strawberries, raspberries, blackberries, dewberries, and all kinds of cantaloupes and melons grow to perfection in this region. It offers extraordinary attractions for those who may desire to engage in fruit growing and stock raising in a most delightful climate, where good health always figures in the profits of the business. Lands suitable for fruit growing and stock raising are remarkably cheap. The wild pea, the hog pea, beggar lice, and other leguminous plants flourish; and various native grasses are spontaneous. Herd's grass and orchard grass grow well in various parts of this section. Indian corn, wheat, and buckwheat yield well in some localities: cabbage, beans, peas, onions, and sweet potatoes are profitable crops;

while the Irish potato grows to perfection. Honeybees thrive in the wild state, and bee keeping is a profitable industry for those who engage in it.

Extensive developments in the coal fields are in progress, and the opportunities for profitable investments in timber and coal in this section are abundant.

THE HIGHLAND RIM.

This rim, 9,300 square miles in extent, surrounds the blue-grass region of Middle Tennessee. The counties of Macon, Overton, Pickett, Putnam, Clay, Jackson, White, Warren, Coffee, Franklin, Lawrence, Wayne, Lewis, Hickman, Humphreys, Dickson, Cheatham, Stewart, Montgomery, and Robertson, with parts of Perry, Hardin, Sumner, Cannon, and DeKalb, compose the Highland Rim. It is a splendid agricultural belt. On the eastern edge of the rim the grasses grow luxuriantly, and stock raising—including cattle, sheep, hogs, horses, and mules—is extensively carried on. Wheat, corn, and oats are staple products in all these counties; fruits and vegetables flourish in all of them, and especially on the borders of the table-lands: tobacco is a staple crop on the northern part of the rim; and peanuts are extensively grown in some of the western counties.

The lands are reasonable in price in all this section, and the people are wide awake and progressive.

THE CENTRAL BASIN.

The area of this basin is 5,450 square miles, embracing the counties of Smith, Trousdale, Sumner, Wilson, Rutherford, Davidson, Bedford, Moore, Lincoln, Giles, Marshall, Maury, and Williamson. Here the blue grass grows spontaneously, and all crops suited to the latitude are grown with profit. Wheat, corn, oats, barley, timothy, herd's grass, clover, and vegetables and fruits are extensively cultivated. This region is the paradise of every kind of live stock, from the thoroughbred hog to the thor-

oughbred race horse. Manufacturing is increasing, and agriculture in all its branches is in a flourishing condition. The great phosphate beds are located in this basin, and in some counties the developments are of marvelous richness. The lands are cheaper than lands of like quality and productiveness, with equally good and convenient markets, anywhere in the world.

WESTERN VALLEY OF THE TENNESSEE.

The Western Tennessee Valley, 1,200 square miles in extent, embraces portions of Hardin, Wayne, McNairy, Henderson, Decatur, Humphreys, Benton, Stewart, Houston, and Henry. The valley itself is rich and fertile, with occasional swampy places: and the valleys of the tributaries of the Tennessee River are very productive. Corn, cotton, oats, grasses, hogs and mules are the principal products of this section. Fruits and vegetables thrive well. Lands are reasonable in price.

THE PLATEAU, OR SLOPE, OF WEST TENNESSEE.

This area of 8,850 square miles includes the counties of Carroll, Madison, Haywood, Henderson, Gibson, Weakley, Crockett, and Fayette, with parts of Henry, Henderson, Obion, Tipton, and Shelby. The surface is comparatively level; the soil is light, porous, and siliceous, with a quick fertility that adapts it to the growth of cotton, corn, wheat, tobacco, clover, and the grasses, and makes it the "garden spot" of the State in the production of small fruits and vegetables. Tobacco, wheat, corn, oats, peas, cattle, horses, and mules are the staple products of the northern end of this plateau; while cotton, corn, fruit, and vegetables are the chief products of the southern end.

In the central portion all kinds of grain, clover, and the grasses grow well, and the small fruits and vegetables approximate perfection. Large quantities of fruits and vegetables are grown for the Northern markets, and those who have engaged in the business have found it very profit-

able. Tomatoes, strawberries, asparagus, and early apples and peaches have been especially profitable to growers. The shipping facilities are excellent, the markets are convenient, and the lands are low in price compared with lands of equally productive capacity in any other part of the United States. With Chicago, St. Louis, Louisville, and Cincinnati in direct rail communication, from ten to twelve hours distant, early fruits and vegetables grown in this section find a ready market at remunerative prices. Diversity of crops enables the farmers who practice that system of farming to have something coming into market all the year around, though many still adhere to cotton as the staple crop.

There is profit in raising horses and mules, hogs and cattle, chickens and turkeys, hay and grain, as well as in cotton and fruits and vegetables; and the farmers of this section of the State are every year diversifying more and more. There is a notable increase in manufacturing in this section, which augurs still greater prosperity in the future.

THE MISSISSIPPI BOTTOMS.

That portion of the Mississippi Valley proper which marks the western border of the State, including the counties of Lake, Dyer, Lauderdale, nearly all of Tipton and Shelby, and a part of Obion, Crockett, and Haywood, is 900 square miles in area, and is the richest soil in the State. The soil is especially adapted to the growth of corn, cotton, and the grasses. Its fertility is inexhaustible, and vegetation grows rank all over it. It was originally rich in timber, which has been cut away in a large measure and the lands brought into cultivation. Development in this section has been rapid in the past decade, and it still continues on enlarging lines. While cotton and corn are the leading crops, more attention is paid each year to fruits and vegetables, grasses and stock. The price of land is moderate and the opportunities for profitable investment are excellent.

MANUFACTURERS.

A comparative statement of the manufacturing and mechanical industries of the State, as shown by each census from 1850 to 1900, shows a remarkable growth during that period. The population during that period increased from 1,002,717 to 2,020,616, or 101.5 per cent; while the average number of wage earners employed increased from 12,039 to 50,167, or 316.7 per cent. The largest number of wage earners employed at any one time in 1900 was 72,618, or 3.6 per cent of the total population. The capital employed increased from \$6,527,729 in 1850 to \$71,182,966 in 1900; the cost of material used increased from \$5,166,886 in 1850 to \$63,384,665 in 1900, while the value of products increased from \$9,725,608 in 1850 to \$107,437,879 in 1900. The capital employed in 1900, compared with 1890, increased from \$51,475,092 to \$71,182,966; the cost of material used in 1900, compared with 1890, increased from \$40,463,782 to \$63,384,665; the value of products in 1900, compared with 1890, increased from \$72,355,286 to \$107,437,879; the average number of wage earners employed in 1900, compared with 1890, increased from 37,487 to 50,167.

The census report for 1900 says:

“The manufactures of Tennessee are based largely upon natural resources. Since 1880 the increase in the more important manufactures has been marked. Mineral deposits, including iron and copper ores and coal, largely neglected until within the last twenty-five years, are the chief causes of this growth. Fields of coal of excellent coking quality underlie 5,100 square miles of the State, and the production in 1899 amounted to 3,330,659 short tons, or nearly twice the production in 1889. In 1899 Tennessee ranked thirteenth among the States in coal production.

“Tennessee is traversed by several trunk railways. In 1900 its mileage aggregated 3,137 miles, or 7.51 miles per

100 square miles of territory, as compared with an average of 6.51 miles for the United States.

"The State also has several navigable rivers. The Mississippi River, its western boundary, furnishes communication with the entire Mississippi Valley. Manufactures are fairly well distributed and diversified, those based upon grain and lumber predominating in the central and western sections; those based upon minerals, in the eastern part."

The ten leading industries of the State in 1900 embraced 3,787 establishments, or 47.3 per cent of the total number in the State; used a capital of \$43,813,589, or 61.6 per cent of the total; gave employment to 28,478 wage earners, or 56.8 per cent of the total number; and paid \$9,089,597, or 55 per cent of the total wages.

FLOUR.

The manufacture of flour-mill and gristmill products is the most important industry in the State. The 1,618 establishments reported in 1900 gave employment to 1,154 wage earners, or 2.3 per cent of the wage earners employed in the State; and the products were valued at \$21,798,929, or 20.3 per cent of the total value of the products of the State. In 1890 there were 918 establishments, 1,417 wage earners, and products valued at \$12,474,284. The increase in the value of products during the decade was \$9,324,645, or 74.8 per cent. Tennessee has good water power and excellent distributing facilities. Flour and gristmills are found in all parts of the State, though Nashville is the chief center of the industry. Knoxville is the milling center of the eastern section of the State, and the industry is rising into importance at Memphis.

LUMBER.

The manufacture of lumber and timber products ranks second among the industries of the State, with 1,732 establishments, 11,192 wage earners, and products valued

at \$18,127,784. In 1890 there were 820 establishments, 7,424 wage earners, and products valued at \$9,073,686. The increase in the value of products during the decade was \$9,054,098, or 99.8 per cent. The forests of Tennessee contain many species of trees and are among the best in the United States.

The most valuable timbers in the eastern part of the State include oak, ash, hickory, maple, poplar, and chestnut. The Tennessee River and its tributaries bring the logs from the mountains down to Knoxville and Chattanooga, which are leading manufacturing points. Nashville is the principal lumber-manufacturing city in the central part of the State. Poplar, the timber most used there, is found in comparative abundance in the northern and central counties of Eastern and Central Tennessee and in the river counties of Western Tennessee. It is adapted to all purposes of house building, both for construction and outside and inside finish. Oak ranks next in importance. Ash is used for the inside finish of houses and for the manufacture of agricultural implements. For the latter purpose it ranks next to hickory, which is used almost exclusively for wagons, carriages, and handles. The scarcity of walnut and cherry has led to the increasing use of oak, maple, birch, sycamore, and poplar in the manufacture of furniture. Quantities of these timbers are shipped to other States of the Union, to Canada and Mexico, and to Great Britain and other European countries. Memphis is the headquarters of the lumber manufacture in West Tennessee. The chief varieties cut in this section are poplar, white oak, ash, hickory, sycamore, and cypress. Much of it is shipped to the North in the form of planks and staves.

IRON AND STEEL.

In 1900 there were 16 establishments engaged in the manufacture of iron and steel (the industry is third in rank), with 1,979 wage earners, and products valued at \$5,080,624; in 1890 there were 15 establishments,

1,472 wage earners, and products valued at \$4,247,868. The increase in the value of products during the decade was \$832,756, or 19.6 per cent. This industry has been stimulated by abundant deposits of fuel and ore. Coking coal of excellent quality is found in the Cumberland region, the State in 1899 being sixth in rank among the coke-producing States, with a production of 380,525 short tons. This was an increase of 23,561 tons, or 6.6 per cent, over the production of 1889.

The three chief iron-producing districts correspond, in a general way, to the location of the iron-ore deposits. The Eastern District comprises the counties of Johnson, Sullivan, and Washington; the Chattanooga District, the most important of the three, includes the counties of Roane, Rhea, Hamilton, Marion, and Franklin; and the Central District, the counties of Montgomery, Stewart, Dickson, Hickman, Lewis, Lawrence, and Wayne. The furnaces in the last-named district rely chiefly upon charcoal, though some of them have recently begun the use of coke.

FOUNDRIES AND MACHINE SHOPS.

In 1900 there were 95 establishments engaged in the manufacture of foundry and machine-shop products, with 3,146 wage earners, and products valued at \$4,074,509; in 1890 there were 68 establishments, 2,620 wage earners, and products valued at \$4,427,187. The decrease in the value of products during the decade was \$352,678, or 8 per cent.

TEXTILES.

In 1900 there were 72 establishments engaged in the manufacture of textiles, with 4,251 wage earners, and products valued at \$3,907,279; in 1890 there were 69 establishments, 3,051 wage earners, and products valued at \$3,724,138. The increase in the value of products during the decade was \$183,141, or 4.9 per cent.

Tennessee possesses facilities for the ordinary textile

manufactures, the eastern section being well adapted to the production of wool. Knoxville has a large woolen mill, and small woolen mills are scattered over the eastern and central sections. No factories for the manufacture of hosiery and knit goods were reported in 1890; in 1900 there were 4.

RAILROAD SHOPS.

In 1900 there were 16 establishments engaged in car construction and general shop work of steam railroad companies, with 2,817 wage earners, and products valued at \$3,113,053; in 1890 there were 10 establishments, 1,772 wage earners, and products valued at \$1,605,778. The increase in the value of products during the decade was \$1,507,275, or 93.9 per cent.

TOBACCO.

In 1900 there were 92 establishments engaged in the manufacture of tobacco, with 1,237 wage earners, and products valued at \$3,010,602; in 1890 there were 54 establishments, 700 wage earners, and products valued at \$853,529. The increase in the value of products during the decade was \$2,157,073, or 252.7 per cent. In addition to the ordinary varieties, Tennessee produces several kinds of fine tobaccos, the most important being the bright tobaccos of Greene County and the fine red shipping tobaccos of the Clarksville District.

COTTON-SEED OIL.

In 1900 there were 17 establishments engaged in the manufacture of cotton-seed oil and cake, with 751 wage earners, and products valued at \$2,980,041; in 1890 there were 15 establishments, 1,030 wage earners, and products valued at \$2,504,741. The increase in the value of products during the decade was \$475,300, or 19 per cent. The industry is carried on most extensively in the western section of the State, centering at Memphis.

LEATHER.

In 1900 there were 44 establishments engaged in the manufacture of leather, with 803 wage earners, and products valued at \$2,802,117; in 1890 there were 60 establishments, 612 wage earners, and products valued at \$1,266,556. The increase in the value of products during the decade was \$1,535,561, or 121.2 per cent.

PLANING MILLS.

In 1900 there were 85 establishments engaged in the manufacture of planing-mill products, with 1,148 wage earners, and products valued at \$2,273,457; in 1890 there were 73 establishments, 1,498 wage earners, and products valued at \$3,450,243. The decrease in the value of products during the decade was \$1,176,786, or 34.1 per cent.

AGRICULTURAL CONDITIONS IN TENNESSEE.

Agricultural conditions in Tennessee are steadily improving, keeping pace with the growth of commerce and the developments in mining and manufacturing. The total number of farms on June 1, 1900, was 224,623. The value of farms at that date was \$265,150,750. The lands and improvements other than buildings were valued at \$202,013,790, and the value of buildings on the farms was \$63,136,960. The live stock was valued at \$60,818,605, and the value of farm implements and machinery was \$15,232,670.

Adding all these items together gives us \$341,202,025 as the value of farm property. The total value of farm products for 1899 was \$106,166,440. Of this amount, 33.4 per cent, amounting to \$35,421,198, represents the value of animal products, and 66.6 per cent, amounting to \$70,745,242, represents the value of crops, including timber cut from the land.

FARM PRODUCTS.

Corn.....	\$28,059,508	Peanuts.....	\$ 392,648
Wheat.....	7,882,697	Fruits.....	2,193,318
Oats.....	887,940	Hay and forage.....	6,811,577
Other cereals.....	81,147	Sorghum cane sold....	61,793
Potatoes.....	817,419	Sorghum sirup.....	585,336
Sweet potatoes.....	883,620	Cotton.....	8,192,642
Onions.....	106,421	Cotton seed.....	971,046
Beans.....	57,660	Tobacco.....	2,748,495
Peas.....	767,840	Broom corn.....	47,252
Value of other vegeta-		Value of forest prod-	
bles.....	3,339,132	ucts.....	5,086,624
Clover seed.....	34,145	Miscellaneous.....	660,350
Other grass seed.....	70,332	Total.....	\$70,745,242

ANIMAL PRODUCTS.

Wool.....	\$ 263,779
Dairy products.....	8,028,466
Poultry and eggs.....	7,398,075
Honey and wax.....	259,691
Meat products.....	19,471,187
Total.....	\$35,421,198

FRUIT TREES.

There are in the State fruit trees as follows:

Apple.....	7,714,053
Peach.....	2,749,203
Apricot, cherry, pear, plum, and prune.....	1,198,286

Total fruit trees.....11,708,629

COTTON AND GRAIN PRODUCTION.

The cotton and grain production in Tennessee, according to the census report for 1900, is as follows:

Cotton production for 1899-1900 (500-pound bales)...	235,008
Wheat production for 1899 (bushels).....	11,924,010
Corn production for 1899 (bushels).....	67,307,790
Oat production for 1899 (bushels).....	2,725,330
Other cereal production for 1899 (bushels).....	138,402

LIVE STOCK STATISTICS.

The live stock on hand, according to the census of 1900, was as follows:

Cattle of all kinds	962,553
Dairy cows.....	351,949
Horses.....	391,604
Mules.....	264,248
Sheep.....	499,277
Hogs.....	2,059,896
Asses and burros.....	9,395

FARMS AND FARM ACREAGE FROM 1850 TO 1900.

The following table from the census report for 1900 shows the farm acreage and the number of farms from 1850 to 1890, as shown in each census year:

YEAR.	Number of Farms.	NUMBER OF ACRES IN FARMS.				Per Cent of Farm-land Improved.
		Improved.	Unimproved.	Total.	Average.	
1900.	224,623	10,245,950	10,096,108	20,342,058	90.6	50.4
1890.	171,412	9,362,555	10,799,028	20,161,583	115.6	46.4
1880.	165,650	8,496,556	12,170,359	20,666,915	124.8	41.1
1870.	118,111	6,843,278	12,737,936	19,581,214	165.7	34.9
1860.	82,368	6,745,337	13,873,828	20,619,165	250.9	32.9
1850.	72,735	5,175,173	13,808,819	18,984,022	261.0	27.3

The total number of farms reported in 1900 was over three times as great as in 1850 and 28.8 per cent greater than in 1890. The total acreage has not increased rapidly, the gain since 1850 being but 7.2 per cent, and in the last decade but 0.9 per cent. These changes have resulted in a continuous decrease in the average size of farms, indicating a progressive division of farm holdings and a more complete utilization of the soil. The area of improved land has increased continuously since 1870 and at a more rapid rate than the total farm acreage, the per cent of farm land improved being greater in 1900 than in any previous census year.

FARM PROPERTY AND PRODUCTS.

The following table from the census report for 1900 shows the values of specified classes of farm property and of products from 1850 to 1900:

YEAR.	Land, Improvements, and Buildings.	Implements and Machinery.	Total Value of Farm Property.	Live Stock.	Farm Products.*
1900.....	\$265,150,770	\$15,232,670	\$311,202,025	\$60,818,605	\$105,166,440
1890.....	212,700,540	9,933,880	312,834,600	60,274,220	75,191,181
1880.....	206,749,837	9,054,863	259,476,170	43,651,470	62,076,311
1870†.....	218,743,747	8,199,487	282,027,309	55,084,075	‡86,172,847
1860.....	271,378,185	8,465,792	310,036,292	60,211,425	.....
1850.....	97,851,212	5,330,210	133,189,438	29,378,016	.....

* For year preceding that designated.

† Values for 1870 were reported in depreciated currency. To reduce to specie basis of other years, they must be diminished one-fifth.

‡ Includes betterments and additions to live stock.

The total value of farm property for 1860 includes slaves and other property swept away by the Civil War. Deducting one-fifth from the total value of farm property for 1870 would reduce it to \$225,621,848, showing a loss on account of the war of \$114,414,354, in addition to the loss of the large percentage of increase during the decade from 1860 to 1870 which, but for the war, would have followed. A comparison of the tables for 1860 and 1900 shows that it has required forty years for Tennessee to reach the total value of farm property that she had before the war. Notwithstanding the destruction of property caused by the Civil War, the State shows a remarkable agricultural growth and development in the last half century. The increase in the total value of farm property since 1890 was \$28,310,375, or 9 per cent. The increase in the value of land, improvements, and buildings was \$22,450,210, or 9.3 per cent; in that of implements and machinery, \$5,295,790, or 53.3 per cent; and in that of live stock, \$564,375, or 0.9 per cent. The value of farm products in 1899 was 92.4 per cent greater than the value reported for 1889.

COAL AND IRON.

[The following article on the coal and iron interests of Tennessee was especially prepared for this publication by Col. A. M. Shook, of Nashville, Tenn., who is perhaps the best-informed man in the State on this subject:]

The coal and iron deposits of Tennessee commence with its northeastern boundary and follow closely the Tennessee and Cumberland Rivers or their respective tributaries almost as far as they run through the State. East Tennessee is very abundantly blessed with both coal and iron ore, widely distributed. The coals rank high, especially for steam and domestic purposes. It also contains a large area of coking coals that compare favorably with other coking coals of the South. The ores, also widely distributed, are both red and brown. The red ores are a part of the great Clinton lead, extending from New York to Alabama and passing through East Tennessee. The quantity, quality, location, and dip control the value of these ores, which have a very wide range, varying from a high-grade soft ore, carrying 55 per cent metallic iron, to a low-grade hard ore, carrying only about 20 per cent metallic iron. The brown ores are also widely scattered, and vary about as much in quality as the red ores. Some of the brown ores in Coe County are especially fine, carrying nearly 60 per cent metallic iron; but, unfortunately, they also carry a high percentage of phosphorus. The high-grade magnetic ores of the Cranberry field also occur in limited quantities in one or two border counties in Tennessee.

All the ores of East Tennessee carry a large percentage of silica, except the magnetic ores of Carter and Johnson Counties and the high phosphorous ores of Coe County. The most abundant and reliable supply is from the Clinton lead, which carries either a large percentage of silica or too much lime. Tennessee, like the other Southern States, has practically no ore that is low enough in phosphorus to make acid Bessemer steel; while all the East Tennessee ores make an iron that is splendidly adapted

to the manufacture of basic, open-hearth steel, which is the coming product.

Chattanooga seems to be the logical and natural center of the iron and coal industry of East Tennessee on account of its geographical position, in the center of the coal and iron fields; its magnificent railroad facilities for assembling the raw materials and distributing the manufactured products; its great river, the upper tributaries of which drain the virgin forests of Upper East Tennessee and Virginia, and also the coal and iron ore deposits; while the Lower Tennessee River furnishes an outlet by water for its manufactured products. Chattanooga is the only city or town in the South to-day that is making pig iron that consumes more than it makes. Notwithstanding the fact that it is the third largest pig-iron producing district in the South, it is to-day importing pig iron from the other Southern districts, for the reason that its manufacturing establishments consume more than the local furnaces produce.

The coal field of Tennessee, lying between the Tennessee and Cumberland Rivers and their tributaries, is the largest undeveloped coal field in the United States. It is true that the Cincinnati Southern Railroad crosses the field and some development has been done along its line. The Southern Railway also penetrates the field from Knoxville to Jellico, and here is found the largest development of domestic and steam coal. The Nashville, Chattanooga and St. Louis Railway skirts the western border from Cowan to Chattanooga, the largest development being at Tracy City, Whitwell, and Bon Air. The Tennessee Central Railroad, just completed to Nashville, opens up the eastern side of the field and makes available the magnificent domestic coals of the Upper Cumberland River. This great coal field, with the Tennessee River on one side, the Cumberland River on the other side; the Cincinnati Southern Railroad crossing it from north to south; the Southern Railway penetrating the eastern end; the Nash-

ville, Chattanooga and St. Louis Railway skirting its western and southern borders; the Jasper, Tracy City, and Sparta branches penetrating it on the south and west; and the Tennessee Central Railroad skirting the eastern and northern boundary, is still practically undeveloped.

Recent tests in Grundy, Marion, and White Counties have greatly increased the value of this part of the coal field. The Sewanee vein is justly entitled to first place as a coking and steam coal. It has, until quite recently, been regarded as the top, or upper, seam, and is easily located, being immediately above the lower conglomerate, which forms the table stone, or capstone, of the Cumberland Plateau. Four miles north of Tracy City recent tests have developed a vein above the Sewanee vein, and also the presence of the upper conglomerate, which is immediately under the upper Sewanee seam. This vein, until the last few months, has been regarded as the main Sewanee vein. The fact that it is the upper seam and 40 feet above the main Sewanee seam greatly enlarges the area occupied by the main Sewanee seam.

The lower measures have only been worked successfully at Bon Air, in White County. While the coal is found under the table rock and can be traced without difficulty from Pikeville, Tenn., to Bridgeport, Ala., on the east, and from Cowan to Bon Air, on the west, at no other place has it been found thick enough to work successfully until within the past few months. The "Need More" mines have been opened in Marion County, near Bridgeport, Ala., where the coal is uniform in quality and averages from 3 feet 4 inches to 5 feet 2 inches in thickness. Recent test holes a few miles north of Bon Air, in White County, have developed a thickness ranging from 3 feet 6 inches to 5 feet 4 inches. A shaft has been sunk less than 200 feet deep to the coal, and the Nashville, Chattanooga and St. Louis Railway is extending the Sparta branch to the place. This is a fine domestic coal, a good

steam coal, and a fair gas coal, and is now being worked extensively at Bon Air.

The Sewanee and Bon Air veins have been definitely and accurately located with pick and shovel. The veins that are being developed by the Tennessee Central Railroad have not been definitely located with reference to the Sewanee and Bon Air veins. A thorough and accurate geological survey of this coal field is greatly needed, so that the value, extent, geographical and geological position this great coal field holds can be seen and appreciated.

What is known as the "western iron belt" of Lower Middle Tennessee and West Tennessee extends entirely across the State, from Kentucky, on the north, to Alabama, on the south, embracing the counties of Stewart, Lewis, Lawrence, Wayne, and others. Six blast furnaces are now operating in this belt—two in Wayne County, one in Hickman County, one in Dickson County, one in Montgomery County, and one in Stewart County. All use local ores, with coke as fuel, except the Stewart County plant, which uses charcoal; and this plant occupies the proud distinction of being able to sell its product at a higher price than any other blast furnace in the United States on account of its superior quality, almost the entire output being used at Pittsburg in the manufacture of chilled rolls.

From the ores of Stewart County the celebrated "Tennessee iron" of fifty years ago was made. The quality was so good that the makers proudly advertised the fact that no boiler made from "Tennessee iron" had ever been known to explode.

The ores of Wayne County are as remarkable as those of Stewart, but of a very different character, and the product is used for a very different purpose. While the ores of Stewart County get their value from low phosphorus and low silicon product, the ores of Wayne County derive their value from high phosphorous and high silicon product. A recent sale of high phosphorus, high silicon pig iron from Wayne County brought higher prices than any pig iron

in this country, except the low phosphorous, low silicon, cold-blast charcoal iron of Stewart County. The Stewart County ores puddle well; the Wayne County ores melt well. Between these extremes are found large quantities of ore suitable for forge and foundry iron required for ordinary purposes.

All the furnaces in the field, except the one in Montgomery County, were originally built for the manufacture of charcoal iron, including three others that are now idle; but all are now running on coke, except the Stewart County furnace. The reasons that brought about the change from charcoal to coke are that the amount of wood required to make charcoal, even for a small furnace, very soon exhausts the adjacent country of timber. Through this section the average yield is about 25 cords per acre. The average yield of charcoal is 40 bushels per cord. It takes 100 bushels of charcoal to make a ton of hot-blast iron. So that a furnace running on charcoal and making 50 tons per day will consume the entire yield of 5 acres every day, or 1 acre for every 10 tons of iron made; while a vein of coal 4 feet thick will produce 5,000 tons per acre and make 3,000 tons of coke per acre, which will make, approximately, 3,000 tons of pig iron. In other words, an acre of coal 4 feet thick will make 300 times as much coke iron as an acre of timber that will cut 25 cords will make of charcoal iron. An additional reason for changing from charcoal to coke is that by the use of coke the capacity of the furnace is increased nearly 50 per cent; and still another reason is that for ordinary forge and foundry work coke iron sells for about as much as charcoal, the exception being for specialties, such as car wheels, chilled rolls, etc.

The future of this great iron field depends upon the price of coke. To-day it is shipping all the coke used in the five furnaces that are in blast from Big Stone Gap, Ky., an average of over 500 miles by rail; and while the rate of freight is not excessive, being less than one-half

of a cent per ton per mile, it amounts to nearly \$3 per ton of iron.

If the coal fields that are penetrated by the Nashville, Chattanooga and St. Louis Railway and the Tennessee Central Railroad were sufficiently developed and equipped with coke ovens to furnish this supply of coke, it would reduce the average haul to less than 250 miles, reduce the freight cost per ton of iron from \$3 to \$1.50, and give employment to 1,500 men at the mines, increasing the value of both coal and iron ore lands and increasing the tonnage to our railroads. This applies only to the furnaces in Tennessee. The extensive developments at Florence, Ala., and Sheffield, Ala., draw largely on this ore field for a supply for six large coke furnaces at these places. These furnaces will consume 2,000 tons of coke daily, which means 3,500 tons of coal. This would more than double the number of men employed in the coal mines and ratably increase the value of our coal fields, in addition to giving a largely increased tonnage to our railroads.

Present conditions and the outlook for iron products certainly warrant the development of this great coking coal field to a point that will at least supply the present demand.

The undisputed fact that coal and iron are our greatest wealth-producing commodities and the presence of both in such large quantities in Tennessee only emphasizes the necessity for their greater development.

TENNESSEE PHOSPHATES.

[Through the courtesy of Dr. C. W. Hayes, of the United States Geological Survey, I present to those interested a practical treatise prepared by him on the phosphates of the State, the mining of which, though now only in its infancy, will doubtless prove a great industry.]

High-grade phosphate rock, in sufficient quantity to be of commercial importance, was first discovered in Tennes-

see in 1893. No rock was mined for shipment in that year, but in 1894 shipments began and have steadily increased up to 1900. During 1901 the production on the sales basis showed a slight decrease from the previous year. This was due in part to heavy rainfall flooding the mines and in part to the attitude of foreign phosphate manufacturers, who withheld orders, awaiting a fall in the price. From 1894 to the close of 1901, 1,808,943 tons had been mined and sold at a total valuation at the mines of \$4,596,158. The rapid development of the industry is shown by the following table, taken from "Statistics of the Division of Mineral Resources of the United States Geological Survey" for 1901, which gives the production and value of the product by years:

PRODUCTION OF PHOSPHATE ROCK IN TENNESSEE.

YEAR.	Quantity— Long Tons.	Value.
1894.....	19,188	\$ 67,158
1895.....	38,515	82,160
1896.....	26,157	57,370
1897.....	128,723	193,115
1898.....	308,107	498,392
1899.....	424,109	1,177,166
1900.....	454,491	1,328,707
1901.....	409,653	1,192,090

It will thus be seen that, next to coal, phosphate is the most important mineral product of the State.

Classification.—Three distinct species of phosphate rock occur in commercial quantities in Tennessee, and all of them, so far as at present known, are confined to this State. These three species are conveniently distinguished by their prevailing color, as (1) brown, (2) black or blue, and (3) white phosphate. The black phosphate is further distinguished as "bedded" and "nodular," only the bedded rock, however, being commercially important. Also, the white rock is distinguished as "lamellar," "breccia," and "stony." Here, again, only the first is at pres-

ent utilized. These several species and varieties of the phosphate rock occur at different geological horizons, have different associations and origins. They will be taken up and described in the order given above, which is that of their relative age, and happens also to be the order of their relative commercial importance.

Composition.—Phosphate rock consists essentially of tricalcium phosphate, which has the chemical formula $\text{Ca}_3 \text{P}_2 \text{O}_8$. This is often referred to as "bone phosphate of lime," because it is the substance which enters chiefly into the composition of bone. In addition to this calcium phosphate, the rock contains a variety of other substances as impurities. The most abundant are silica, in the form of quartz or chert; various iron compounds, as the oxide, sulphide (iron pyrites), carbonate or phosphate, silicate of aluminium (clay), calcium carbonate (calcite or limestone); and organic matter, both of animal and vegetable origin. The sum of these accessory constituents of the phosphate rock is rarely less than 20 per cent, the remaining 80 per cent being calcium phosphate. From this minimum of 18 or 20 per cent, they increase until the phosphate itself becomes a subordinate constituent or disappears, and the rock passes into a sandstone, limestone, or shale. There is, therefore, no sharp line separating phosphate rock from other rocks of great diversity, but a gradual passage from one to the others. To form a commercial product, however, the rock must have at least 65 per cent of calcium phosphate, and its value increases rapidly with each additional per cent, since the other constituents are not only objectionable as so much dead weight to be transported, but some of them seriously interfere with the treatment of the rock in converting it into fertilizer.

Brown Phosphate.—Brown phosphate, as its name implies, is characterized by a rusty brown or yellowish color, frequently a decided gray on a fresh fracture. The brown color is due to iron oxide, which is always more or less abundantly associated with the rock. It always has a

porous structure, and consequently a low specific gravity. In some cases it is composed chiefly of very small rounded and highly polished grains of lime phosphate; in other cases these grains are obscure or wanting, and the rock consists of a cellular mass, the walls of the cells being made up of compact gray phosphate. The casts of numerous minute coiled shells also occur in the rock, and in some cases impressions of large bivalve shells. The rock occurs in the form of loose plates from $\frac{1}{2}$ inch to 4 inches in thickness, and sometimes several feet broad. These are separated by more or less reddish clay. They sometimes retain very nearly their original horizontal position, although they are elsewhere often greatly disturbed. These plates, as they are exposed in the process of mining, have the appearance of a rather evenly laid stone wall. They form a layer which varies widely in thickness in different parts of the field, from a few inches up to 15 or 18 feet. The phosphate is generally covered by a layer of red clay from a few inches up to 10 feet in thickness.

The immediate source of the phosphate is very evident, although its remoter origin is more difficult to determine. In mining, masses of limestone are frequently met with replacing the layer of phosphate rock. These are seen to be composed of alternating bands of partially crystalline blue limestone and gray or brownish phosphatic limestone. When such a rock is exposed to the action of surface waters containing carbonic and other organic acids, the lime is leached out and removed, while the phosphate, being very much less soluble, remains. The layers of gray phosphatic limestone thus give rise to the plates of brown phosphate, while the intervening layers of blue limestone are reduced to the thin layers of ferruginous clay which occur between the phosphate plates. There is, in this process of leaching, generally, a great reduction in the volume of the original rock. The phosphatic layers usually retain their original thickness in the plates of brown phosphate, but the intervening layers of blue limestone are reduced to a small

fraction of their original volume. Whenever the leaching takes place irregularly and masses of unleached limestone are left, the resulting phosphate plates sag down between adjacent limestone masses, and are thus in many places more or less broken and disturbed. They can, however, be seen to pass directly into the phosphatic layers of the limestone, and their derivation from the latter is, therefore, unquestionable. The brown phosphate varies greatly in hardness, from a soft, incoherent sand to a hard, ringing rock.

At a few localities the phosphate, instead of occurring in alternating layers of phosphatic limestone and blue crystalline limestone, is concentrated in beds of considerable thickness, up to 2 or 3 feet. These beds contain only a small percentage of lime, and, therefore, form high-grade phosphates without the preliminary leaching which is essential in most cases. In some cases the color is light gray; in others, bluish gray grading into black. The latter rock very closely resembles the blue Devonian rock, to be described later, and has sometimes been mistaken for it. This variety of rock has been found at only a few localities in Maury County.

The brown phosphate is associated with several of the Silurian limestone formations which form the surface in the Central Basin of Tennessee. These formations, from the Devonian downward, are named as follows: Clifton, Fernvale, Leiper, Cathey, Bigby, Hermitage, Carter, and Lebanon. ("Columbia Quadrangle, Geological Atlas of the United States, United States Geological Survey"—in press.) Three of these formations—namely, the Leiper, Bigby, and Hermitage—contain limestones which are sufficiently phosphatic to yield high-grade rock in commercial quantities. The phosphate of the Hermitage formation is the least important and is confined to the southern portion of the field, chiefly in the vicinity of Mount Pleasant. The most important phosphatic beds occur in the Bigby formation. Brown phosphates de-

rived from this formation are found in Giles County, very extensively in Maury County, and to some extent in Williamson and Davidson Counties. The phosphates derived from the Leiper occur to some extent in Maury County, but chiefly in Sumner County. It will thus be seen that all the counties which occupy the western margin of the Central Basin of Tennessee contain more or less of the brown phosphate. At many places this is not sufficiently high grade or sufficient in amount to warrant working at the present time. The workable field, however, while it is strictly limited by geologic and topographic conditions, will gradually expand as means of transportation are improved and the demand for low-grade rock increases.

The geologic conditions which determine the presence of workable phosphate are: First, the presence at the surface of one or the other of the phosphate-bearing formations; secondly, the presence in these formations of beds sufficiently high in phosphate to yield a commercial product after the removal of the lime. While these limestones were being formed on the sea bottom, the sea appears to have been quite shallow, and only in certain places, where conditions were favorable by reason of the depth of water or the direction of the currents, was the phosphate deposited. Hence it is only in these favorable localities that the rock now yields a phosphate. Even where an abundance of phosphate was deposited, it was sometimes so intimately associated with other insoluble materials, as sand and clay, that the resulting beds are too low grade to be utilized.

It is further important that the topographic conditions shall be such as to favor the weathering of the phosphatic beds over considerable areas. In case the phosphatic bed outcrops on a steep slope, the width of the zone where weathering can take place will be very slight, the greater part of the formation being protected by a great thickness of overlying rocks; also, the leached material, being upon a steep slope, will be rapidly removed; hence the amount

of phosphate contained in the belt will be small. In case the phosphatic bed, on the other hand, forms the surface over a considerable stretch of level country, below which the streams are cut sufficiently deep to afford perfect drainage, the conditions are favorable for leaching of the rock over a broad area, and the width of the phosphate-bearing belt will be correspondingly great.

The importance of these topographic conditions is illustrated in the Swan Creek and Sugar Creek Valleys. In Swan Creek Valley the phosphatic limestone outcrops upon the steep slopes, while the bed, all except a shallow belt, is protected by a great thickness of overlying carboniferous shale and chert; hence the zone of weathering is narrow, and the productive area is correspondingly restricted. In Sugar Creek Valley, on the other hand, the phosphatic beds occupy the surface in broad terraces which extend from the margin of the creek, frequently a quarter or a half mile, back to the foot of the steep slopes. Conditions for leaching are favorable in these terraces, and the areas of the leached rocks are, therefore, very large.

The brown phosphate is mined entirely in open cuts. The clay overburden, from 1 foot to 10 feet in thickness, is first removed, usually with plow and scraper, and the phosphate then taken out with pick and shovel. The rock, after being handled with forks to separate it from the clay, is spread out on the ground and allowed to dry. The drying is hastened by stirring the rock with a harrow. After exposure to the sun in this manner for several days, the rock is more perfectly dried by means of open kilns, being piled up on a platform of wood, which is then burned. While this method of drying is almost universally employed, it gives only moderately satisfactory results. It is neither so economical nor so uniform in its results as some of the more improved driers would appear to be. In some cases the rock is washed, the entire mass of phosphate plates and the intervening clay as it comes from the mine passing through an ordinary log washer, in which the clay is mostly

removed, together with a large amount of the more friable portions of the phosphate. This method of working is much more economical than the ordinary method of forking, for everything which passes through the forks is lost; and where the rock is friable this includes a considerable proportion of the phosphate, along with most of the clay. The present wasteful methods of mining will doubtless be followed until it becomes generally recognized that the supply of high-grade phosphate is by no means inexhaustible. The present dumps will then be worked over at a greatly added cost, since no attempt is ordinarily made to keep the overburden separate from the phosphate waste. If the latter were dried, crushed, and screened or bolted, it appears probable that a high-grade product might be obtained from material which is now a dead loss.

Some attempts have been made to estimate the total amount of brown phosphate in the Tennessee field, but as yet the data are not available for an estimate which has any value. It is impossible to tell, until a field is thoroughly developed, what proportion of the rock is sufficiently leached to make it available. This is the principal source of error in making estimates. Also, the thickness of the phosphate layer is variable, as well as the grade of the rock and the proportion which can be saved in mining. While no estimate in tons can yet be made of the probable yield of the field, it may be definitely stated that the field is by no means inexhaustible. Injudicious statements in the newspapers with regard to the inexhaustible supply of high-grade rock in sight have been of great damage to the producers in demoralizing the markets. Some of the producers themselves believe the supply to be inexhaustible, and consequently pursue ruinously extravagant methods of mining and marketing the rock. Nothing is more certain than that prices will become steady and greatly improve if the producers will exercise ordinary precaution in exploiting their properties.

The most active and extensive development of the brown

phosphate has been in the immediate vicinity of Mount Pleasant. Half a dozen large companies are at present engaged in this district, and the shipments from Mount Pleasant greatly exceed those from all the other districts combined. Two companies are operating north of Columbia, on Carter's Creek, and one in Sumner County, on De-Shea Creek. The mines at these several localities represent the greater part of the present development; but, in addition, small amounts of rock have been mined from various other localities within the belt indicated along the western margin of the Central Basin; also, considerable brown rock has been shipped from the vicinity of Centerville, in Hickman County. The most active company in this region is the Virginia and Carolina Chemical Company, which is developing rather extensive deposits near the mouth of Swan Creek.

Black Phosphate.—The next variety of Tennessee phosphate, and the first to be discovered and mined on a commercial scale, is of Devonian age; therefore it always occurs above the various horizons at which the brown phosphate is found.

The Devonian of Middle Tennessee is represented by only a few feet of rock—which, however, is very characteristic and easily recognized. Although only a few feet, and sometimes a few inches, in thickness, there are three well-characterized and persistent subdivisions, all of which are generally, though not always, present. These are: At the top, the greensand bed; in the middle, the black shale; and at the base, the phosphate bed.

The upper bed is the most persistent of the three. It varies in thickness from 2 or 3 inches to 3 feet. It is greenish in color from the presence of glauconite, or greensand, which also gives it a somewhat sandy texture. It usually contains the phosphatic nodules which form one variety of the black phosphate.

Beneath the greensand bed is the black shale. This is very persistent to the westward, in Hickman and Perry

Counties; but eastward, in Maury and Williamson Counties, it is generally wanting. It occasionally reaches a thickness of 10 feet, although it is more generally about 4 feet. The black shale, as its name implies, is almost jet-black in color, due to the presence of a large amount of finely disseminated organic matter, probably of vegetable origin. It generally splits easily into very thin leaves. This division of the Devonian also occasionally contains phosphatic nodules, but less often than the greensand.

Immediately under the black shale is the bed of black phosphate, which varies in thickness from 1 inch up to 40 inches. While this bed of phosphate is persistent over a large area, embracing the western portions of Maury and Williamson Counties, and the whole of Hickman, Lewis, Perry, and Wayne Counties, it is only locally of sufficient thickness and purity to be of commercial importance. The black phosphate varies widely in appearance and composition. Only that rock which contains more than 60 per cent of lime phosphate can be at present regarded as commercially important. This high-grade rock varies in color from dense black to bluish gray. It may be either fine-grained, having the appearance of a fine black sandstone, or it may have an oölitic structure, being composed largely of small rounded grains with highly polished surfaces. It frequently contains well-rounded water-worn pebbles of phosphate or other material. These conglomerate phases are generally low grade, since the pebbles are apt to be composed of siliceous materials. It also contains occasional fragments of large fish bones and some small bivalve shells. In Maury County and on the various creeks which flow into Duck River, in the eastern portion of Hickman County, the phosphate bed is thin and low grade, containing much quartz and iron pyrites. The greater part of the high-grade rock is found in the valley of Duck River, between Totty's Bend and Centerville, and in the valley of Swan Creek. While the bed is continuous over the whole of this region, it is only in comparatively

small areas that it is sufficiently thick for profitable mining. Westward from Centerville the bed becomes conglomerate and siliceous; while to the southwestward, in Perry and Wayne Counties, it increases in thickness, but also becomes siliceous. In this region it passes into a sandy, phosphatic shale, and is in part represented by several feet of fine gray sandstone.

The black phosphate is mined both by open cuts and tunneling. Since its outcrop is usually on a rather steep slope, the belt within which stripping is profitable is usually quite narrow, and the greater part of the rock must be won by underground mining. When first discovered, the bed was mined where the thickness was 18 inches or more; but since the discovery of the brown phosphate, most of the mines have been abandoned, and only those having an exceptionally high-grade rock or favorable transportation facilities are working at the present time. With an increase in the price of phosphate rock, which will inevitably come, considerable areas of black rock in this field will be worked at a profit. Probably all the beds of 70 per cent of rock over 18 inches in thickness can be profitably mined when the price goes above \$3 per ton. It is evident, therefore, that, while this field shows little activity at present, it is destined to be of considerable importance in the future. It should be clearly understood, however, that the rock is by no means inexhaustible, and the mining should be done in a systematic and economic manner. There is less temptation here, however, to mine extravagantly than in the brown phosphate field.

White Phosphate.—The brown and black phosphates, above described, are now found associated with the rocks with which they were originally deposited on the sea bottom. While they have been consolidated since their deposition, and to some extent changed in composition by leaching, they retain their original position with reference to associated formations. They may, therefore, be called "original deposits." The white phosphate differs from

these in that it is a secondary deposit, and consequently is much more variable in its geological associations than the other two species. Although calcium phosphate is so much less soluble than calcium carbonate that the latter may be entirely removed, while the former is scarcely at all affected (as is seen in the brown phosphates), nevertheless, under certain conditions the calcium phosphate may itself be dissolved. These conditions are probably an abundant supply of the complex organic acids which result from the decomposition of vegetable matter. The phosphate, however, is quickly deposited when the solution reaches the surface, and the character of the resulting deposit will depend upon the conditions under which this deposition took place.

The white phosphate, so far as at present known, is confined chiefly to Perry County. Small amounts have been discovered in Maury County north of Columbia, in connection with the brown phosphates, from which they are evidently derived. The largest deposits, however, are in Perry County, on streams flowing into the Buffalo and Tennessee Rivers. This region between these two rivers consists of a level plateau a little under 1,000 feet in altitude, which has been deeply dissected by the present streams. The surface of this plateau is composed of carboniferous chert. The chert beds, here generally resting immediately upon Silurian limestones, are somewhat undulating; and while many of the streams have cut down through the chert, others have not reached the limestone, their valleys being entirely in the overlying chert. When erosion had reduced the land surface nearly to its present configuration, conditions were favorable for the solution of lime phosphate, probably partly from the thin layer of low-grade Devonian phosphate, partly from the overlying carboniferous limestone, and partly from the underlying Silurian formations. In some places, as on Terrapin and Redbank Creeks, this solution of calcium phosphate came in contact with an extremely siliceous limestone. The cal-

cium carbonate of this rock being more easily soluble than the calcium phosphate, the former was replaced by the latter in accordance with well-understood chemical laws. The rock was thus changed from a siliceous limestone to a siliceous phosphate, but retained very nearly its original structure. This constitutes the stony phosphate. It has a rough fracture, and, when examined under the microscope, is seen to consist of a siliceous skeleton with rhomboidal cavities originally occupied by crystals of calcium carbonate, now filled with white amorphous phosphate. This rock is always too low grade to be utilized at present, since it rarely carries more than 33 per cent of lime phosphate.

In some cases the phosphate-bearing solution reached the surface, where it was covered with a mass of angular chert fragments derived from the disintegration of the carboniferous chert beds. The phosphate was there deposited in the interstices, cementing the chert fragments together. This gave rise to the second variety of breccia phosphate. While the phosphate between the chert fragments is very high grade, it is so intimately mixed with the chert that great difficulty would doubtless be found in separating the two. No attempts have yet been made to utilize this variety.

In some cases the phosphate-bearing solution entered limestone caverns and was there deposited. The surrounding walls of these caverns were subsequently more or less wholly removed by solution and the phosphate was left in the residual clay. In this manner the third variety, the lamellar phosphate, was probably formed. It has thus far been found only at a very few points in sufficient quantity to be of commercial importance. These are in the vicinity of Beardstown and on Tom's Creek, both in Perry County. Small quantities have been found on several of the creeks flowing westward to the Tennessee River south of Tom's Creek, but the conditions are not such as to favor the formation of extensive deposits. It will be readily seen

that these creeks, which have not yet cut down through the chert to the underlying limestone in which the caverns might be formed, do not afford conditions favorable for the accumulation of this variety of phosphate. Such conditions prevail in several of the creeks immediately north of Tom's Creek, and hence phosphate need not be looked for in this region. The lamellar phosphate, as its name implies, is made up of thin plates or lamellæ of nearly pure calcium phosphate. These vary in color from cream white to pink, yellow, or green. The successive lamellæ are often differently colored, giving the rock a beautiful banded appearance. When freed from the greater part of the clay in which it is imbedded, this rock will run over 80 per cent of calcium phosphate. At Wilsdorf's Branch of Tom's Creek the deposit has a thickness of from 3 to 6 feet and covers several acres. It is mined in part by stripping, and, after the overburden becomes too heavy, by tunneling. The rock is prepared for market by being dried in open kilns and then being crushed. These deposits are at present worked by one company on Tom's Creek. The rock is hauled to the Tennessee River, a distance of five miles, and loaded on barges.

WOOD-WORKING INTERESTS OF TENNESSEE.

Tennessee was originally covered by as dense a forest as any other hardwood section in the Union. The necessities of the early settlers and the demand for bread called for the most rapid destruction of the forests possible with the means at hand. These means were ample and sure. The girdling ax, winds, rains, and fire did the work rapidly and effectually. The necessities that compelled the earlier settlers to use these destructive means to open fields are not so urgent now as to justify their descendants in using the same means, which are in practice in some sections of the State to-day. For whatever purpose and

by whatever means the forests of the State may have been and are being destroyed, there has been all along, for more than a century, a wonderful lack of economy practiced in the process of destruction. The early settler cut a young, vigorous tree to make a maul; his successors of to-day cut the stateliest oak for the sake of a few short cuts for staves. A large portion of every tree felled by the lumbermen, stave men, and shingle men is not only an absolute waste, but cumbers the ground and retards other growths.

Notwithstanding the wasteful methods of the past century, Tennessee is still among the leading States, both in quantity and value of forest resources. There are large bodies of the finest of hardwood timber still standing, and there is not a single county in the State where there is any scarcity that is seriously felt; and shipments are constantly made from at least three-fourths of the area of the State. It must be remembered that during the past century of forest destruction there has been a constant and steady reproduction of forest growth on Nature's own plan, unaided by man. In the iron ore counties, where the nature of the soil is not such as to promote rapid tree growth, the third crop of timber for charcoal is now being cut from lands that were absolutely denuded of timber less than ninety years ago. One charcoal iron company is getting its cord wood delivered at \$1.50 per cord from the third crop of timber, cut from lands that were called "coalings" and were treeless eighty years ago. Some lands that were abandoned as "old fields" half a century ago are now covered with merchantable timber.

Another idea must be kept in mind: Nearly all the timber in Tennessee is hardwoods, and from two to four times more valuable than the so-called "soft woods." One white ash tree—standing in one of the oldest-settled and most densely-populated counties in the State and only twelve miles from its capital city—sold during the month of August, 1902, for more cash than any ten of the best

pine trees standing in any of the yellow pine States would bring.

To those not versed in the nomenclature of the lumber trade many of the terms used are misleading. "Hardwood" and "soft wood" are terms that have no relation whatever to the texture of the wood itself. The term "hardwood" applies to all trees that have broad leaves, whether deciduous or evergreen. The "soft woods" include all trees which, instead of leaves, have spines--either single, like the cedar and juniper; or in bunches, like the pines. All trees that have spines for leaves or bear fruit in cones are soft woods. This classification has the sanction of the Division of Forestry of the United States Department of Agriculture and the decisions of several courts.

"Inexhaustible" and "exhausted" are two terms used in the timber trade, as well as in other trades, without regard to their proper meaning. Nothing is inexhaustible except that which produces itself faster than it is consumed, and nothing except inorganic matter can be entirely exhausted. The phosphate rocks of Tennessee may, in the course of ages, become exhausted, because they do not increase. Twenty years ago the large operators in Tennessee red cedar agreed that that timber was exhausted; now we see larger and taller cedar poles for electric wires, just as many fence posts, and the market well supplied with cedar hollow ware, clothes chests, etc. The term "exhausted" will never apply in its literal definition to any of the native families of Tennessee trees.

Prior to 1860 there were no forest products shipped out of the State, with two exceptions. Vast quantities of rived white oak staves were shipped from the lands bordering on the Mississippi River and its tributaries to the New Orleans agents of the French wine growers and the German brewers; also millions of feet of red cedar were sent from Middle Tennessee to Bayou Sara, La. This cedar was used for railroad cross-ties, a purpose for which the wood is less fitted than any hardwood or any of the

pinus. Bayou Sara was the distributing point, and it flowed through a dense brake of cypress, one tie of which wood is worth three ties of red cedar. It was the most absurd mistake known in lumber history, and stripped the counties of Wilson, Rutherford, and Davidson of many square miles of a timber now among the most valuable on the market.

It was not until several years after the close of the war between the States that the grand raid on the hardwoods of the State began in earnest. First came H. Herrmann, the Singer Sewing Machine Company, and others, after black walnut. So anxious were they for the timber and so fully did they realize that the supply was rapidly being exhausted in the States north of the Ohio River that they bought far in advance of immediate needs. They paid for standing trees and let them stand for years; they furnished some mills and hired others; they piled millions of feet on sticks in the woods and hired watchmen to guard it. Thus it happened that the bulk of walnut in accessible localities passed out of the hands of the original owners at merely nominal prices. Many of the stumps sold afterwards for more than the entire tree brought.

The next raid was for yellow poplar, and it is still quite active. The people of the State had a much better idea of the value of poplar than they had of walnut. The latter was looked upon as useful for furniture only, whereas poplar is an "all-around" wood, good for any purpose. A house, from mudsill to roof, together with all the finish and furniture that goes in it, can be made of poplar. The growing scarcity of walnut and its high price have greatly lessened the demand for it, and other woods have been substituted for it; but there is no satisfactory substitute for poplar for all purposes, and probably the demand for it and its price will hold up as long as there is any of it. There yet remains a large amount of poplar in the State, but much of it is remote from transportation points.

When the rush was greatest for the leading woods—

walnut, poplar, oak, and ash—many other native woods that are now prominently on the market were neglected. During the last fifteen years red gum, cypress, chestnut, elm, dogwood, persimmon, and some others are to be found in most large lumber yards; in fact, the State can still furnish almost any kind of wood that grows in the United States east of the Rocky Mountains. Some trees peculiar to a northern climate are found in this State. There is quite a body of white pine in Cumberland County, and there are smaller bunches in several other localities. One sawmill in Johnson County makes a specialty of cutting spruce and hemlock. Any one desirous of engaging in the hardwood wood-working industry need have no fears of lack of suitable woods for any purpose. The leading woods are pretty well distributed all over the State, but the characteristic qualities of every species of trees are considerably modified by quality of soil, elevation, and age. The white oaks on the elevated lands are of much slower growth than those that grow on the alluvial bottom lands, and consequently are closer grained and tougher, therefore better adapted for wagon and implement stock and other purposes. The large, coarser-grained oaks are better suited for cooperage stock and such like, and are more easily worked. The same is true of the hickories and several other woods.

There are ninety-six counties in the State, and there were in operation for more or less time, up to June 30, 1902, 561 sawmills, with a daily capacity of from 5,000 feet up to over 100,000 feet. This is nearly one-half dozen to each county. The number of small sawmills that do only a local business is not known, because they do not appear on the books of the regular wholesale lumber dealers, and are not included in the list given below. Only four counties—Jackson, Clay, Hancock, and Cocke—report no sawmill. The reason is that these counties have good rafting streams to the large markets, where the logs will bring more money than the merchantable lumber

in them would bring if cut at home. As a rule, the country mills use circular saws that cut a wide kerf; and practically all the shipping and mill culls, slabs, and other offal are worse than a dead loss and in the way. In the cities and large markets band saws, which cut a very narrow kerf, are used, and all the offal is utilized. This is why the city mill man can afford to pay such high prices for logs.

There are only 148 planing mills in the State. Some of these—probably thirty—are operated solely by the coffin and box factories; the rest, in connection with sawmills and furniture factories. It can readily be seen that not more than 10 per cent of the output of the sawmills is worked to a finish. Nearly all the rest is shipped to distant points in the rough.

On the three following pages is given a list of the sawmills and planing mills in the State by counties and grand divisions. This list is printed here in order to give those interested an idea of the location of the greatest amount of standing timber in reach of transportation, as, presumably, the counties having the greatest number of sawmills have also the largest amount of available timber. This will not hold true as regards many of the mountain counties in which are vast amounts of fine timber inaccessible as yet for lack of roads.

SAWMILLS AND PLANING MILLS, BY COUNTIES, IN TENNESSEE.

EAST TENNESSEE.

COUNTIES.	Sawmills.	Planing Mills.
Anderson	2	1
Bledsoe.....	1	....
Blount.....	1	1
Bradley.....	4	4
Campbell.....	10	2
Carter.....	9	3
Claiborne.....	1	....
Cocke.....	....	....
Grainger.....	1	1
Greene.....	3	2
Hamblen.....	2	....
Hamilton.....	7	6
Hancock.....	....	....
Hawkins.....	2	....
James.....	1	....
Jefferson.....	3	3
Johnson.....	3	1
Knox.....	7	6
Loudon.....	3	1
McMinn.....	3	1
Marion.....	5	2
Meigs.....	4	2
Monroe.....	1	1
Morgan.....	15	8
Polk.....	1	....
Rhea.....	5	3
Roane.....	8	2
Scott.....	9	1
Sequatchie.....	8	2
Sevier	2	....
Sullivan.....	5	5
Unicoi.....	4	1
Union.....	1	....
Van Buren.....	3	1
Washington.....	7	2
Total for East Tennessee.....	141	62

MIDDLE TENNESSEE.

COUNTIES.	Sawmills.	Planing Mills.
Bedford.....	6	1
Cannon.....	3	1
Cheatlam.....	5	....
Clay.....	....	....
Coffee.....	3	2
Cumberland.....	1	....
Davidson.....	11	15
DeKalb.....	2	1
Dickson.....	5	1
Fentress.....	6	1
Franklin.....	14	1
Giles.....	7	2
Grundy.....	3	....
Hickman.....	8	1
Houston.....	4	....
Humphreys.....	8	....
Jackson.....	....	....
Lawrence.....	23	2
Lewis.....	2	....
Lincoln.....	5	....
Macon.....	7	....
Marshall.....	5	1
Maury.....	4	5
Montgomery.....	3	3
Moore.....	3	2
Perry.....	11	4
Overton.....	4	1
Pickett.....	2	....
Putnam.....	12	....
Robertson.....	5	1
Rutherford.....	6	2
Smith.....	5	1
Stewart.....	2	2
Sumner.....	8	1
Trousdale.....	2	1
Warren.....	7	2
Wayne.....	7	1
White.....	7	1
Williamson.....	2	....
Wilson.....	4	2
Total for Middle Tennessee.....	222	58

WEST TENNESSEE.

COUNTIES.	Sawmills.	Planing Mills.
Benton	9	....
Carroll	5	1
Chester	3	....
Crockett,	8	3
Decatur	3	....
Dyer	22	2
Fayette	3	....
Gibson	9	3
Hardeman	11	1
Hardin	3	....
Haywood	22	....
Henderson,	19	....
Henry	3	2
Lake	9	1
Lauderdale	7	1
McNairy	4	....
Madison	7	2
Obion	14	4
Shelby	17	4
Tipton	15	3
Weakley	14	1
Total for West Tennessee	198	28

SUMMARY.

STATE DIVISIONS.	Sawmills.	Planing Mills.
Total for East Tennessee	141	62
Total for Middle Tennessee	222	58
Total for West Tennessee	198	28
Total for the State	561	148

The table below gives the actual number of wood-working plants in operation in the State. The classification, however, is not completely accurate. For instance, some under the item "Cooperage and cooperage stock" make only staves; others make nothing except heading. Complete wagons, buggies, wheelbarrows, etc., are put under the same heading as the plants that manufacture only spokes, felloes, etc. This is done for the purpose of condensing this article. The classification is sufficient for all practical purposes. The table is as follows:

WOOD-WORKING PLANTS IN TENNESSEE.

Cooperage and cooperage stock.....	47
Hardwood doors, sash, frames, etc.....	45
Furniture and furniture stock.....	35
Boxes and crates.....	22
Implements	10
Wagons and vehicle stock.....	32
Handles.....	13
Shingles	6
Cedar goods and wooden-ware	8
Burial cases and coffins.....	8
Chairs and chair stock	9
Veneers	2
Oars.....	1
Faucets.....	1
Telegraph and telephone poles, pins, brackets, etc.....	3
Meat skewers.....	1
Pumps	2

Only 245 plants in the State that work wood to a complete or partial finish! This is truly a sorry showing for a State possessing such vast timber resources; but it also shows most conclusively what a splendid inducement the conditions offer for the profitable investment of capital in additional and larger plants. It will surprise one not familiar with the subject to be told that more timber is consumed in the manufacture of packing cases, boxes, crates, coffins, cooperage, and burial cases than enters into the construction of houses, but such is a fact; and there are only 22 box factories in the State, and there are only 8

factories to manufacture coffins for the annual dead of a population of over 2,000,000! In all other lines our productive capacity is still farther below the normal demand.

To those not familiar with the conditions in this State a few general remarks may be of value and interest. The matter of transportation is a controlling factor in the manufacture and marketing of all manner of wood goods. In this respect the State is well provided. Besides two splendid navigable rivers that traverse the State for almost its entire length, there are a great number of splendid logging streams; and the laws relating to flotation of log and lumber rafts are quite favorable to lumbermen. There are more than 40 railroads traversing or touching the State that were built under as many different charters, but by process of consolidation and "merging" they are all operated under 30 names. This "merging" process, however, does not reduce their mileage or affect their freight schedules. The average rainfall is ample to insure several tides in all the navigable and logging streams every year.

Timber in this State is real estate as long as it is standing, but it becomes personal property as soon as it is cut down. The assessment of timber lands for taxation is very low, and in the mountain sections it is merely nominal; and in many cases no attempt is made to collect any tax at all. Under the State Constitution no tax can be levied upon any article manufactured in the State from the products of the soil of the State. Taxes on the lumber industries are inconsequential.

Prices of standing timber vary, of course, with kind, quality, and location; and any attempt to give them would lead to more confusion than profit. It is bought in many ways:

1. Land and timber on it are bought by the acre, or by a lump sum for an entire tract. In some sections the purchase of land with the timber has proven highly profit-

able, as the land after the timber has been cut off is actually worth, and sells for, more for farming purposes than it cost with the timber on it. This applies to the fertile, alluvial lands, and is an important feature, because it does not apply to the barren, sandy soils of the white pine region of the Northwest, some sections of the pine belt of the South, and the mountain spruce and hemlock lands of Pennsylvania and other of the Northeastern States, which are worthless after the timber is removed.

2. The entire timber on a given tract is bought, with a definite time limit for its removal.

3. Sometimes only a certain species of trees on a tract—say hickory, for instance—is wanted. In such case the contract generally specifies all the trees of the kind wanted on the tract, from a given diameter up.

4. Very often timber is bought to be cut and delivered at so much per 1,000 feet by a given measure.

5. Sometimes the owner of a portable sawmill, having but limited capital, contracts with a timber owner to cut it into lumber for so much per 1,000 feet.

There are in this State two distinct rules for the measurement of logs, both of which are recognized by custom and the courts. One is for the measurement of logs in water, in rafts, where but few of the defects can be seen. It is known as the "Cumberland River Rule," and was first used in this State in the early fifties. At that time only 7-gauge and 8-gauge circular saws were used, and the rule allowed for a quarter of an inch saw kerf and a liberal allowance for slabbing. The rule is: "From the diameter of the log subtract one-third for squaring (slabbing). From the square thus obtained subtract one-fifth one way for saw kerf." The result is the contents of the log in inch boards. Large logs, if free of defects, cut under this rule by a 16-gauge band saw, will produce 40 per cent more of inch boards than the rule calls for. But river logs are rarely free from defects; and a big allowance must be made for "plugging," "edging up," "loading with

sand," and other rascally tricks familiar to every log raftsman.

The other rule is used exclusively for measuring logs on land when all the defects can be seen, and is known as the "Doyle Rule." It is given fully in "Scribner's Log Book," an old and standard work. It superseded the "Scribner Rule" about 20 years ago. Doyle arrived at the contents of a log by this process: "From the diameter in inches subtract four. Square one-fourth of the remainder and multiply the product by the length in feet." In practice the rule is simplified thus: "From the diameter in inches subtract four and square the remainder." This gives the contents of a 16-foot log. Then increase or diminish for other lengths, thus: For a 20-foot log, add one-fourth; for a 14-foot log, subtract one-eighth; and so on. In actual practice no figuring is done, but a stick, containing the contents of all diameters and lengths for either rule, is used.

THE CLAY DEPOSITS OF TENNESSEE.

By LUCIUS POLK BROWN.

As a preliminary to the detailed consideration of the clay deposits of Tennessee, a short explanation of general considerations as to clays is appropriate.

The ultimate source of all clays is the "weathering" of the feldspars of the igneous rocks. These consist of several varieties, agreeing in that they all may be considered as silicate of aluminium in combination in varying amounts with silicates of potash, lime, and soda. Much the most important of these from the present standpoint is orthoclase, or potash feldspar, the chemical formula of which is $KAlSi_3O_8$. On "weathering," this splits up into a potash compound, which is soluble, and is carried off in the drainage and the hydrated silicate of alumina.

known as "kaolin"—or, commonly, "porcelain clay"—which is not dissolved. This contains 46.30 per cent of silica, 39.80 per cent of alumina, 13.90 per cent of water. It is white in color, plastic when moistened, shrinks considerably on drying, and, when heated highly, consolidates into a hard, dense mass, requiring a very high temperature to fuse it. The various clays of commerce are mixtures of kaolin with extraneous matters of different classes in varying proportions.

Clays with regard to present location may be of two classes—i. e., original or transported. The former results from the decay, under atmospheric or (often) fumarolic action, of feldspar in place and subsequent removal of the alkalis; the latter results from transportation of the decayed material of the feldspathic rocks and redeposition at a locality more or less remote from its source. In this the *sorting* action of water plays an important part, and a pulverulent material, like clay, may remain in suspension long after such comparatively coarse matter as sand, mica flakes, etc., has been deposited. The contact of fresh water and salt water also has probably acted in a very important manner to effect the precipitation of suspended clay matters. Clays are divided according to their degrees of purity and intended uses into kaolin, pipe clay, potters' clay (including ball clays), fire clay, brick clays, or loam, etc. While this classification is empirical, it is based chiefly on physical properties, which are determined by tests. The different foreign materials act about as follows: Sand, the most abundant, usually has no positively bad effects, and may even be beneficial in preventing shrinkage in drying; but in fire clays, a clay containing any large proportion of sand is less apt to stand up than one approaching nearer to kaolin in its composition. For all uses except paving brick (in which a glassy surface is desirable) the other impurities of clays—which are usually iron oxides, lime carbonate, magnesium carbonate, and the alkalis, potash and soda—are positive disadvantages,

causing the ware to melt down in burning and to take disagreeable colors, etc.

Besides clays, the other ingredients used in the manufacture of pottery are feldspar, silica (as a pure sand or flint), and various coloring materials. Their distribution in the State will be briefly noticed later. Mention must also be made of the fact that the various slates and shales are simply clay beds consolidated by time and pressure. They may obviously range in purity just as clays themselves do, and are now becoming an important source of material for paving bricks. They are, of course, nonplastic, and must be ground up very fine for use. Clays themselves possess varying degrees of plasticity, and some important varieties are nonplastic. Obviously also the "weathering" of a slate or shale may furnish material for other slates, shales, or clays under the above-mentioned action of water; and so our present clay beds may have been several times worked over since their material was first parted from its parent rock.

EAST TENNESSEE.

The clays of each grand division of the State will be considered separately. In Tennessee, so far as I know, no nontransported clay materials exist; but if any such occur, they will be found along the eastern boundary, in the area of the metamorphic and igneous rocks. A number of good deposits of potters' clay and one or two of the better-colored pipe clay occur in Upper East Tennessee as transported material deposited in old or existing river bottoms. Not far from Cleveland, in Bradley County, a bed of white clay occurs in association with infusorial earth; and it has been used for making white or cream brick, for which it seems well adapted. In the valley of the Tennessee River occur several small deposits of potters' clay of fair quality, some of which are, I believe, worked for the manufacture of sewer pipe at Chattanooga, where large factories are in operation. The clays of the coal measures of the

Cumberland Plateau are usually of considerable importance, and are probably deserving of more attention than they have had. They usually rank as fire clays, are pretty abundant, and, of course, will be easily worked, owing to their proximity to the coal seams. In some instances coal miners are manufacturing fire brick, etc.; and with the present considerable attention to, and demand for, clay wares in the South, other miners would probably find it to their interest to at least consider the matter fully.

MIDDLE TENNESSEE.

The same coal-measure clays as just mentioned occur to a small extent in the eastern counties of this division; but, for the most part, the clays of the division are impure river-bottom deposits or residual deposits left by the decay of argillaceous limestones *in situ*. At Nashville are found several excellent beds of a "fat," red loam; and several quite extensive brickyards making ordinary red pressed brick and terra cotta, all of a pleasing red color, have been established on them. The red clays of the division generally are excellently adapted to such manufactures, and the products are usually tough and without a tendency to efflorescence. As to the residual clays, an historically interesting fact is that, in connection with a small, one-wheel pottery maintained in Hickman County several years ago by the descendants of old English potters, on a bed of clay left by the "weathering" of an argillaceous limestone of Niagara age, the first mine of manganese ore in the United States was opened. This was in the small pockets of pyrolusite found extensively in the lower carboniferous of the Highland Rim, and the ore was used for glazing. The clay made a close, firm ware of a red color.

WEST TENNESSEE.

This is much the richest in clays of any of the grand divisions of the State. They range from brick clays, or

loams, up to fine "ball clays" in variety, and occur in the Tertiary and Cretaceous areas, possibly most largely in the latter. The vicinity of Paris, in Henry County, and Camden, in Benton County, are quite rich in these clays, the first especially having been well exploited. In color these Henry County clays vary greatly, from cream and nearly pure white to a dark brown or black. Some of the last are particularly "fat," or plastic; but the color does not seem to burn out, and they are, therefore, adapted only to some special uses. A "ball clay" is a quite plastic clay used in mixture with less plastic clays. Only within the past few years has much attention been paid to West Tennessee clays; but it is my opinion that large bodies of excellent "ball clays," besides those already worked, abound there. Seeing that these clays sell for two or three times as much as ordinary potters' clay, this fact is of importance. The clays of West Tennessee occur practically all over the division, from the tier of counties bordering the Tennessee River, in beds of somewhat irregular thickness and extent, but often of enormous size and without very considerable overburden. Mention is to be made particularly of the large deposits at Grand Junction, La-Grange, etc. The West Tennessee clays will usually class as excellent potters' clay, or stoneware clay. Many local potteries of some size already exist—as at Paris, Grand Junction, Pinson, McKenzie, etc.—and their product is a hard, dense stoneware, usually glazed with "Albany slip," or salt-glazed. Excellent fire bricks have also been manufactured from certain of these clays. No rocks, of course, exist in the beds to interfere with their working; but occasionally small lenses and stringers of sand are met with, and some nodules of ironstone and pyrite. These latter may disappear with depth, as they seem at present to be mostly on the upper surface. There is usually little lime, magnesia, or alkalis. Most of the clays require some washing for use in the finer kinds of ware, such as "hotel china," "C. C.," etc.

The prospects of building up local pottery industries would seem fairly good, provided care is taken to locate where a local market can be had and help can live comfortably. The coals of Western Kentucky, East Tennessee, and Southern Illinois are comparatively close, and the great development of railways in West Tennessee makes almost any of its larger towns an excellent distributing point. Well-conducted potteries on the same belt outside the State have been successful. To the farmer his clay beds may be of value, but in order to derive the best results he should ascertain their extent and quality. The former is easily done by simple means—such as pitting, or boring with an earth auger—and the latter can be ascertained by having his clay tested and analyzed, the expense of neither of which is great.

OTHER POTTERY MATERIALS IN THE STATE.

It seems probable that no feldspar, which is used pretty extensively as a flux, exists in the State. Considerable beds of sand, furnishing the quartz needed in pottery making, exist; and probably some of them are sufficiently pure both for pottery and glass. Near Saulsbury considerable beds of a colored sand are worked a little and shipped to Memphis for making colored mortars. The Chilhowee sandstone of the Eastern Division is often very pure and white; and it, or beds derived from it, might also be used for these purposes.

COPPER.

Copper is found in the counties of Polk and Monroe, but the only mines in operation in the State are those at Ducktown, Polk County. The Ducktown Mineral District embraces Polk County, Tenn.; Fannin County, Ga.; and Cherokee County, N. C.; though the develop-

ments are confined to Tennessee. The Ducktown Sulphur, Copper and Iron Company is operating three mines, and the Tennessee Copper Company is operating the same number, making a total of six mines in the State. The production for 1898 was 89,721 long tons, for 1899 it was 100,022 tons, and for 1900 it was 116,000 long tons, showing an increase in the output of 26,297 tons in 1899 over 1898 and an increase of 15,978 tons in 1900 over 1899. The production for 1901 was 203,580 long tons, showing an increase for 1901 over 1900 of 87,580 long tons. The production for 1901 in short tons was 263,571. Both of these companies are doing a profitable business; and considering the extent of the Ducktown Mineral District and its richness, we may reasonably expect the investment of more capital in this field and larger and richer developments in the future.

MARBLE.

The Tennessee marbles are known the world over for their varied beauty, burden-bearing strength, and durability. Actual tests have shown them to be the most compact stones of the kind in existence. They range in color from very dark-mottled chocolate to pure white, and they are susceptible of the highest polish. Their solidity commends them for exterior finishings, and their beauty creates a demand for them for interior decorations. Tennessee marbles do not absorb stains from soot or sulphur fumes or tannin from overhanging trees; and if stained in any way, they are easily cleansed with plain soap and water. For monuments or for building stones the Tennessee marbles stand unrivaled.

The National Capitol at Washington, the State Capitol at Nashville, and numerous other public buildings attest their superiority. The marble belt is about 150 miles in length and averages about 20 miles in width. Over this

immense territory great deposits of fine marble are found. Knoxville has four large mills working in marble, and all running to their fullest capacity. In Hawkins County there is one mill in operation. Knoxville is the center of the marble industry. This district extends from a point in McMinn County below Athens to Hawkins County, near the eastern border of the State. It is traversed by the Southern Railway; the Knoxville and Ohio Railway; the Atlanta, Knoxville and Northern Railroad; the Morristown and Cumberland Gap Railroad; and the Knoxville, Cumberland Gap and Louisville Railroads; and is intersected in many places by the Tennessee River. The railroads and the river furnish very cheap transportation to market, and the field is one which affords splendid opportunities for the profitable investment of capital. Marble is also found in the counties of Lincoln, Benton, and Henry, but there has not been any development in these counties.

LEAD.

Lead ore is found in various localities in Tennessee, but there are not any lead mines now in operation in the State. The Confederate States Government mined considerable lead at or near Philadelphia, Loudon County, during the Civil War; but the Federal forces seized the mine and suspended the operations, since which time it has remained idle. On Flat Creek, in the same county, lead was mined and smelted fifty years ago; but the field was abandoned long ago for unknown reasons. Lead was also mined at Leadvale, Jefferson County, forty years ago, but that is now an abandoned field. There is a body of undeveloped lead ore near Carpenter's Station, Blount County, controlled by Knoxville parties. A mine at Cleveland was profitably worked to a depth of about 100 feet and then abandoned, but work has since been resumed, with ample

capital, and the developments point to very profitable results. The work in this branch of mining has heretofore been done in an unsatisfactory and irregular fashion by persons of small means and limited experience, but it is the belief of those best informed on the subject that there will be large profits in the business for men of capital and experience.

BARYTES.

This mineral is being mined and shipped from Sweetwater and Philadelphia and from the Matlock Mines, on the Tennessee River below Loudon. The product occurs in bodies or beds of clay at numerous points in the valley of the Tennessee River in East Tennessee, but the largest known deposits are in Sevier County, thirty miles above Knoxville; in Cocke and Greene Counties, near Madisonville and Sweetwater, Monroe County; and near Philadelphia, Loudon County. A mill for grinding the ores has been erected at Knoxville. The deposits in Cocke and Greene Counties are said to be practically inexhaustible, and the ores are of excellent quality. Near Myer's Station, on the Southern Railway, there are six parallel veins, crossed by sharp ridges, so that the ore may be crosscut by tunneling and stoped at low cost, without the necessity of hoisting or pumping for years to come.

ZINC.

The zinc-mining industry is in its infancy in this State. Splendid opportunities exist for profitable investments in this business at several points in East Tennessee. The Knoxville zinc belt passes through Monroe County. It has been opened at Eve Mills, and shows an extensive body of ore-bearing dolomite. The ore body is some 400 feet across, and extends for miles across the country. Near

Carpenter's Station, Blount County, on the line of the Atlanta, Knoxville and Northern Railroad, both zinc and lead are found. Assays show 81 per cent of lead. At Love's Creek there is a large body of ore-bearing dolomite, where a shaft has been sunk, and good ore is found. Mines are being worked at McMillan's Station and at Mascot, on the Southern Railway, with satisfactory results. Some work has been done at Mossy Creek, Leadvale, and other points in this field; but the developments are slight. The Clinton zinc belt contains extensive ore deposits, but they are not being worked to any considerable extent, because the transportation facilities are not satisfactory. Tests with the diamond drill have demonstrated that this is a very rich field, which only needs capital for its development into a field of immense productiveness. These two belts continue through the entire eastern portion of the State, and the field is one well worth the consideration and investigation of capitalists.

MANGANESE.

Deposits of this ore occur at various points throughout East Tennessee. It is found in pockets of clay along the lines of the Southern Railway; the Atlanta, Knoxville and Northern Railroad; and the Virginia and Southern Railroad. Several years ago several car loads of it were mined and shipped from Sweetwater, and it averaged 60 per cent metallic manganese. The clay in this section is ore bearing, and would pay a good dividend if properly treated. The same quality of ore is found at Hodge's Switch, on the Southern Railway; and at points near Madisonville, Friendship, and Louisville, along the Atlanta, Knoxville and Northern Railroad. Considerable quantities of ore are found at Montvale Springs, and the deposits have been partially opened. Good ore is found near Newport, on the lands of the Tennessee Coal, Iron and Railroad Company.

There are large and valuable deposits of this ore in Carter, Jefferson, and Unicoi Counties, which should engage the attention of capitalists.

SLATE.

Slate of the best quality is found at several points in East Tennessee. Near Tellico Plains, the terminus of the Tellico Railway, both purple slate and black slate of first-class quality for roofing have been found; and on the Tennessee River, some eighteen miles from McGhee's Station, large quarries have been opened, showing inexhaustible quantities of slate of the best quality; but the work at the quarry has ceased, because the lack of proper transportation facilities rendered the business unprofitable. The same belt crops out in Sevier County, but it is too far from means of transportation to be made available. The slate quarries of East Tennessee will engage the attention of capitalists as the means of transportation improve.

STONE.

The different varieties of sandstone in the State are designated as "brown," "gray," "iron," and "Pottsdam" (or "Chilhowee"). The iron variety is a lime of coarse crystallization carrying considerable iron. This stone neither cracks nor disintegrates under exposure to the weather. It is largely used by railway companies in the construction of culverts and abutments and for bridge piers. Pottsdam (or Chilhowee) sandstone is composed of a clear, white, coarsely-crystallized sand, and is an excellent building stone. Gray sandstone is also a fine building stone, and is found in quantities that promise an ample supply for an indefinite period of time. There are large bodies of the brown sandstone on the Clinch River, near

Clinton, and it was largely used in the construction of the courthouse at Clinton. All these building stones, in addition to the supply of marble, will furnish ample building material of the finest quality for ages to come. There are still splendid opportunities for investments in the operation of stone and marble quarries in this State.

PETROLEUM.

Great interest has been awakened recently in the Tennessee oil field, and prospecting is going forward at various points in the recognized oil belt. So far the only paying wells in the State are located at and around Bob's Bar, in Fentress County. These wells are connected with the Wayne County (Ky.) oil fields by pipe line. This oil belt extends through Kentucky across Tennessee on a direct line with the Beaumont (Texas) field, the belt lying along a line north, 45 degrees east, and underlying in part the counties of Clay, Jackson, Pickett, Fentress, Overton, Putnam, Smith, DeKalb, Wilson, Rutherford, Cannon, Bedford, Lincoln, Marshall, and Giles. The developments on the eastern end of this belt in Kentucky, just across the Tennessee line, warrant the belief that oil will be found in paying quantities at other points in the Tennessee field.

THE BEEF-CATTLE INDUSTRY.

BY ANDREW M. SOULE.

INTRODUCTION.

The present status of the beef-cattle industry in the State is far from satisfactory. As a business, it has received but little attention in the past, owing to the belief that other forms of farming were more profitable and to the lack of easy shipping facilities and the failure to pur-

sue a systematic rotation of crops, which is necessary in order to provide suitable "roughness" and concentrates for the winter feeding of beef cattle.

BEEF CATTLE IN THE STATE.

Unfortunately, no figures are available to show the present condition of the industry; but it is manifest to all thoughtful persons that it is growing rapidly in public favor. With the assistance of some figures drawn from the census report of 1900, it will be possible to give a fair idea of the number, age, and character of beef cattle held in the State; and with this information in hand, some very important and useful deductions can be drawn for the future guidance of our people. The census report shows that on June 1, 1900, there were held on the farms of the State 236,000 calves under one year of age, 110,900 steers over one year and under two years, 68,301 steers two and under three years, and 20,127 steers three years and over. There were also 94,224 heifers one year and under two years old and 49,560 neat cattle two years and over classed as other than dairy cows. Doubtless a number of the 94,224 heifers should be classed as dairy animals, but on that point the census makes no distinction. These figures apply only to cattle held on farms and ranges, and not on all inclosures in the State. If all the inclosures were considered, the number in each class would be considerably increased. According to these figures, the annual calf crop is 236,000. As the total number of animals classed as one-year-olds, two-year-olds, and three-year-olds aggregates only 198,796, it seems that 37,204 of these calves must either be classed as dairy animals, slaughtered or disposed of in some other way, or else the number of beef cattle in the State would have increased more rapidly during the last decade.

DEMAND FOR "STOCKERS."

While our common cattle are frequently deficient in quality and often do not mature and fatten so rapidly as animals of a higher grade, their value is fully appreciated, or else they would not be in such great demand. That they are in keen demand is shown by the fact that of the 198,796 beef cattle which must have been disposed of in 1900, or else the total number held in the State would have increased in the past decade, only 20,127 were classed as three-year-olds and 68,301 as two-year-olds, leaving 110,368 that were either fed and slaughtered in the State or shipped out as "stockers." These figures are very surprising; for without native cattle, one would naturally expect many more of them to be two-year-olds and three-year-olds before they were ready for sale, even off the grass in lean condition for winter feeding. This is the best evidence of the demand for them and of the appreciation in which they are held in other sections of the country.

IMPORTANCE OF CATTLE INTERESTS.

Leaving out of consideration the calf crop, the other three classes of cattle, according to the figures quoted above, would be worth \$3,137,744.36. The animals sold in the State had an aggregate value of \$11,121,141; the animals slaughtered, a value of \$8,350,046—making a total of \$19,471,087, constituting 18.3 per cent of the value of all farm products. The number of farms that report animals slaughtered having an average farm value of \$45.75 is 182,375, or 81.2 per cent. The animals reported slaughtered by 122,341 farms constitute 54.5 per cent of the total number, the average amount received per farm being \$90.91. The animals slaughtered on the farms would, as a rule, be hogs; so that a large per cent of the beef cattle disposed of would of necessity go outside the State. The farmers' interest in beef cattle is shown by the fact that of the 224,623 farms in the State, 185,311

report live-stock interests. This leaves 39,312 farms where no apparent interest is taken in stock husbandry. The number not interested in live stock is surprisingly large, representing as it does about one-fifth of all the farms in the State.

COMPARATIVE VALUE OF BEEF CATTLE IN SEVERAL STATES.

The value of all the cattle held in the State is placed at \$16.88 per head; of calves, at \$6.81 per head; of "long" yearlings, at \$12.98 per head; of two-year-olds and over, at \$18.10 per head; and of steers, at \$24.38 per head. Let us see how these prices compare with those in a number of other States where the agricultural industries are both specialized and varied:

STATE.	Calves.	Yearlings.	Two-year-olds.	Over Two Years.
Tennessee	\$6 81	\$12 98	\$18 10	\$24 38
Kentucky	9 90	20 00	30 90	43 17
Virginia	7 86	16 83	27 00	36 61
North Carolina	3 85	8 30	12 41	18 64
Alabama	3 87	6 84	9 76	20 56
Pennsylvania	7 20	16 01	29 62	43 51

The table shows that while the value of all classes of animals in Virginia and Kentucky is somewhat higher than in Tennessee, the greatest difference is observed between the two-year-olds and the three-year-olds. As already indicated, most of the animals sent from Tennessee leave the State as yearlings. They are winter fed in Kentucky and Virginia, a fact which explains their higher value, and should convince our farmers of the importance of keeping them at home and feeding them here, as we possess advantages not enjoyed by the feeders of these other States. So the difference in the average value of the live stock in Tennessee and these other States would not be very great, provided the animals received the same treatment. Any remaining difference due to better quality possessed by the average animal in Kentucky and Virginia can be easily

overcome through the general use of pure-bred sires on our common cows. Notice that North Carolina and Alabama, States which produce a large amount of cotton, are a long way behind Tennessee in the quality of their stock, a calf, yearling, and two-year-old being worth only half as much as in Tennessee. In Pennsylvania, a State where diversified and intensive agriculture is practiced, yearlings and two-year-old and three-year-old animals are worth considerably more than in Tennessee. This is not due so much to a difference in "quality" as to the better feeding they received from birth forward, a point that cannot be emphasized too strongly.

TENNESSEE'S RANK IN THE PRODUCTION OF BEEF CATTLE.

According to the Twelfth Census, Tennessee ranks twenty-second in the ownership of neat cattle. With regard to the number of beef cattle held in the Southern States, Tennessee stands second only to Kentucky. Texas is, of course, left out of the reckoning, as its area is so much greater than that of any of the other States considered. Comparing the number of cattle held in the following States, Tennessee shows up well in regard to numbers, though the total value of all animals still leaves much to be desired.

STATE.	Calves.	Yearlings.	Two-year-olds.	Three-year-olds.	Total.	Value.
Tennessee.	236,000	110,368	68,301	20,127	434,796	\$ 1,766,641
Kentucky.....	250,502	141,943	107,655	49,580	549,680	10,798,342
Virginia.....	162,053	91,579	87,026	79,203	419,861	8,064,388
North Carolina.....	142,686	63,828	26,579	30,692	263,785	1,815,684
Alabama	213,397	52,023	37,001	40,436	342,857	2,374,885
Georgia	211,579	62,128	36,100	31,251	341,061	1,789,970

In preparing this table, all the animals classed as calves in the census report have been included. Doubtless a number of these were dairy animals; but as the census makes no distinction on that point, the comparison is fair

to the several States. Observe that Kentucky has only 14,502 more calves and 31,575 more yearlings than Tennessee, but over 39,354 two-year-olds and more than 29,453 three-year-olds, which gives it 114,884 more neat cattle than Tennessee owns; and as nearly half this number are two-year-olds and three-year-olds, their value is much greater and accounts in part for the high value of the beef cattle held in that State. Virginia has 18,789 less yearlings, but 18,715 more two-year-olds and 59,076 more three-year-olds, though her annual calf crop is 73,947 less than Tennessee's. The total number of the different animals held, however, is 419,864, almost as many as in this State, while their total value is much greater. The difference is chiefly due to the high average value of the two-year-olds and the three-year-olds. On the basis of the calf crop the large number of two-year-olds and three-year-olds possessed by Virginia and Kentucky can only be accounted for through the purchase of large numbers from other States, and it is for the purpose of bringing out this fact and pointing out the error of our breeders in permitting their cattle to go to other States in a "half-finished" condition and at a low sale price that this table has been introduced. What Tennessee farmers need to do is to keep their "half-finished" beef cattle at home and "finish" them here, and so obtain the top market price. The condition of the stock in many of the cotton-growing States is certainly deplorable, emphasizing the importance of "grading up" and the necessity of giving better care and management to those animals already owned in the several States.

INFLUENCE OF THE CIVIL WAR.

In this connection it will be interesting to see what progress has been made in the cattle business in some of the Southern States in the past thirty or forty years. The following table brings this out very nicely, giving the total number of animals on all the farms in 1860, 1870, and 1900:

STATE.	NUMBER OF ANIMALS.		
	1860.	1870.	1900.
Tennessee.....	764,732	613,696	912,183
Kentucky.....	836,059	700,327	1,083,248
Virginia.....	1,014,167	511,743	825,512
North Carolina.....	693,810	521,162	621,518
Mississippi.....	729,909	501,075	873,356
Alabama.....	773,396	487,163	799,734
Georgia.....	1,005,882	697,903	899,491

The effects of the war are very clearly shown, as many of the States did not possess as many animals in 1870 as they did in 1860. In 1900 most of them show a satisfactory increase, and among this number is Tennessee. Virginia, North Carolina, and Georgia do not now possess as many cattle as they did in 1860; while Tennessee, Kentucky, and Mississippi have made a very satisfactory increase. These figures indicate an increasing interest in the cattle business; and having now fully recovered from the effects of the war, we may expect the matter of winter feeding to receive the attention its importance merits.

DISTRIBUTION OF CATTLE BY TYPE OF FARM.

There is no way of distinguishing between the number of beef and dairy cattle held on the different type farms of the State; but a study of the figures presented herewith is instructive, because it shows that more than one-third of all the cattle in the State are found on live-stock farms. The number of animals on stock farms was 240,150 on June 1, 1900; the next largest number found on hay and grain farms was 143,290; while on the 53,405 farms on which cotton was produced there were only 37,447 head of cattle. Yet these farms in the majority of instances had more grain to feed to cattle than any of the others. The number of cattle held on farms where diversified agriculture is practiced was 99,116. Only a

comparatively few animals were held on special-type farms, such as vegetable, fruit, sugar, etc.

DISTRIBUTION OF CATTLE BY OWNERSHIP.

Of the total number of neat cattle held in the State, 355,644 were the property of owners; of part owners, 51,286; the joint property of owners and tenants, 14,130; belonging to managers of estates, 9,828; the property of cash tenants, 34,148; belonging to share tenants, 66,988. By far the greater number of the cattle in the State were, therefore, the property of the owners of the land, and so there should be every incentive for the improvement of their quality.

CATTLE PER FARM.

At an earlier day many of the cattle were held on a few farms of large area. According to the census of 1900, there were 711 cattle on farms of under three acres, 5,146 on farms of from 3 to 10 acres, 16,117 on farms of from 10 to 20 acres, 60,730 on farms of from 20 to 50 acres, 101,548 on farms of from 50 to 100 acres, 136,134 on farms of from 100 to 175 acres, 83,055 on farms of from 175 to 200 acres, 86,215 on farms of from 200 to 500 acres, 23,767 on farms of from 500 to 1,000 acres, and 17,464 on farms of over 1,000 acres. It seems that by far the greater number of the cattle owned in Tennessee are found on farms of from 50 to 500 acres; in other words, they are in the hands of small farmers, and not on the ranges or great estates. Thus every farmer in the State has an interest in the development of the beef-cattle industry.

SHOULD TENNESSEE DEVELOP THE BEEF INDUSTRY?

The acreage of improved land in Tennessee is from 25 to 50 per cent of the total area. During the past decade our improved lands increased only 16 per cent. As the majority of our farms are from 100 to 200 acres in extent

and the value of our farm products is only from 4 to 7 per cent and the value of our farm lands is from 10 to 20 per cent, there is certainly every reason why an effort should be made to conserve and improve the fertility of our land, thereby increasing its productiveness, the value of the crop per acre, and the price of the land. This can undoubtedly be done more economically and with the greatest dispatch through the development of our cattle interests. Tennessee should certainly develop the feeding of beef cattle on a large scale because of the many excellent food stuffs that are grown which are not now very largely utilized at home, but are permitted to go to other States where the winter feeding of beef cattle is engaged in more extensively.

THE COTTON CROP.

In 1899 there were produced 234,592 bales of cotton, yielding 117,504,070 pounds of lint. As already noticed, 39,312 farms report no interest in stock, whereas the 623,137 acres cultivated in cotton in the State in 1899 were on 53,405 farms. It appears that on an average these farms produced 2,200 pounds of lint, or 189 pounds per acre; and the total value of the crop, including the cotton seed, was \$14.72 per acre. It is plain on the face of these returns that the cotton lands are not producing what they would under better treatment. If farmyard manure were available, the yield would be materially increased and the purchase of commercial fertilizer would be very considerably reduced. By maintaining stock on the farm, many of the leguminous crops which improve the soil could be brought into the rotation and pastured off to advantage. The writer does not wish to see the percentage of cotton produced in Tennessee decreased. Those who advocate the abandonment of cotton farming take an unreasonable view of the situation. What should be done is to combine cotton and stock farming, not only improving the cotton farms, but feeding the meal and by-products

of the cotton plant on the lands producing them, and then their fertility can be maintained indefinitely. If the cotton farms produce more by-products than they can consume on their own lands, they should certainly be utilized by farmers in other sections of the State, and not be permitted to go outside the State. Allowing that two pounds of cotton seed were produced for each pound of lint in 1899, there were produced 117,504 tons of cotton seed, equal to 47,001.6 tons of meal; allowing that a pound of cotton-seed meal is equal to one and one-half pounds of corn for feeding purposes (a moderate estimate), the cotton products were equal to 2,517,943 bushels of corn, or enough to feed 70,502 1,000-pound steers for 120 days. If this number of steers had been fed on the cotton products which must be combined with corn in order to make the most economical gains, all of the "stockers" must have been sold into other States, or else the number of beef cattle would materially increase and could be fed at home, and, instead of selling for 3 cents, would have brought nearer 5 cents. In addition, the excreta from the animals fed cotton products, if properly preserved, would contain about 96 per cent of all the fertilizing elements in the original foods. If only 75 per cent of the excreta were properly preserved and returned to the soil, it would have been worth \$705,015, which in itself would have been a handsome profit, even if the cattle had not brought more than the purchase price in addition to paying for the feed consumed.

THE CORN CROP.

Besides the cotton crop, the State can produce an almost unlimited supply of corn, if the area devoted to that cereal is sufficiently increased. The present year it is estimated that the crop will approximate 80,000,000 bushels, grown on less than 3,500,000 acres of land. The area devoted to the corn crop could be doubled to advantage. As it is, there are many farmers in Tennessee, especially in the river bottoms, who are trying to sell their corn at from

35 cents to 40 cents per bushel, whereas it has been shown at the Experiment Station that they can obtain much more than this for it through the winter feeding of cattle or the fattening of hogs. On one farm which has been called particularly to the attention of the writer there is enough corn produced to winter fatten the 7,000 head of "stockers" which one buyer in the State purchased and sent out this year to be winter fed in Maryland, Pennsylvania, and Virginia. Why the farmers should desire to sell their corn at so great a sacrifice, when they can purchase the beef cattle at home at a reasonable cost, is hard to understand. It certainly must be attributed to a failure to recognize the importance of the industry.

CENTER OF THE BEEF-CATTLE INDUSTRY.

The table below shows the counties in which the beef cattle are found in greatest numbers. The column showing calves under one year old doubtless includes dairy calves, but there is no way of making a distinction on this point. Only a few counties can be considered in this table, but those holding the largest number of beef cattle have been selected, the others not mentioned ranging below these; and, in fact, in some counties hardly any beef cattle are owned. The table follows:

COUNTY.	Calves.	Yearlings.	Two-year-olds.	Three-year-olds.	Total.
Wilson.....	5,300	2,881	1,707	276	10,164
Dyer.....	5,271	2,380	1,600	678	9,929
Gibson.....	5,787	2,191	1,555	282	9,815
Greene.....	5,251	2,971	1,257	205	9,684
Maury.....	1,799	2,905	1,417	326	9,447
Rutherford.....	5,102	3,008	1,141	169	9,120
Giles.....	4,589	2,529	1,564	336	9,018
Obion.....	1,795	2,305	1,148	283	8,531
Shelby.....	5,752	1,267	1,009	265	8,293
Sumner.....	3,521	2,398	1,827	130	7,876
Lincoln.....	3,991	2,484	797	92	7,364
Bedford.....	3,334	2,229	1,380	237	7,180
Weakley.....	4,537	1,479	699	180	6,895
Williamson.....	4,158	1,720	837	99	6,814
Blount.....	3,001	2,099	1,380	212	6,722
Knox.....	4,313	1,197	577	213	6,600
Davidson.....	3,849	1,336	1,083	301	6,591

The largest number of beef cattle are held in Wilson County—namely, 10,164; Dyer County is second, with 9,929; Gibson County is third, with 9,815; Greene County is fourth, with 9,684; and Maury County is fifth, with 9,447; and so they go on down. There is not one of these counties which could not maintain from three to five times as many beef cattle as it now owns, were the business developed on the basis its importance as a means of improving the agriculture of the South, coupled with its profitableness, would warrant. The indifferent development of the cattle business in some of the counties can be imagined when it is seen that the county holding the largest number in the State possesses only 10,164 head. In order that the importance of developing the cattle business may be more clearly recognized, it is necessary to study this table in conjunction with the two following ones, which deal with the centers of corn and cotton production in the State.

CENTER OF CORN PRODUCTION.

With regard to the corn production, only those counties have been mentioned where the yield in 1899 was over 1,000,000 bushels:

COUNTY.	Number of Acres.	Yield, in Bushels.
Gibson.....	80,815	1,988,480
Obion.....	60,195	1,873,790
Giles.....	85,294	1,798,010
Weakley.....	69,888	1,741,560
Maury.....	80,611	1,597,400
Rutherford.....	90,932	1,465,300
Lincoln.....	74,331	1,459,840
Dyer.....	40,287	1,449,000
Wilson.....	74,828	1,353,820
Shelby.....	70,679	1,342,720
Williamson.....	62,094	1,237,570
Bedford.....	64,266	1,182,380
Carroll.....	56,722	1,161,130
Lauderdale.....	40,499	1,106,570
Henry.....	54,719	1,081,400
Hardin.....	47,714	1,058,950
Sumner.....	54,751	1,036,810
Tipton.....	44,564	1,007,220

In glancing at this table, it is quite apparent that in some counties the yield per acre is much greater than in others; and if equal areas were cultivated in all the counties, some of those now making only 1,000,000 bushels each would probably run close to 2,000,000 or 2,500,000 bushels. Every one of the counties mentioned could produce at least twice the number of bushels of corn with which it is here credited. The county producing the largest crop of corn in 1899 was Gibson, with 1,988,480 bushels; Obion was second, with 1,873,790 bushels; and Giles was third, with 1,798,040 bushels; and so it goes gradually on down to Tipton, which produced 1,007,220 bushels.

Comparing this table with the centers of the cattle industry, it seems that Wilson County, containing the largest number of cattle, stood ninth in the production of corn; Dyer County was second in the number of cattle and eighth in the production of corn; Gibson County was third in the production of cattle and first in the production of corn; Greene County was fourth in the production of cattle, but produced less than 1,000,000 bushels of corn, and had no cotton products available for winter feeding except by purchase; Maury County was fifth in the number of cattle and also in the production of corn; and Rutherford was sixth in each instance.

It thus seems that the cattle industry in the counties mentioned was not developed in proportion to the production of grain; and the writer desires to emphasize this point most emphatically, as it brings out one of the greatest weaknesses in our present system of farming—namely, the failure to keep at home and utilize the grain crops in the production of a finished article, a manufactured article, and high-class beef cattle that command a good market price and enable the farmer to retain at least three-fourths of the fertilizing ingredients in his crops on his farm. Notice that Greene, Blount, and Knox Counties, which produced less than 1,000,000 bushels and had no

cotton products, possessed very considerable numbers of live stock—more in proportion to the topography than many other counties in the State. The census shows that the winter maintenance of these cattle is probably due to the large amount of shredded stover put up in these counties. In Greene County in 1899 it amounted to 8,274 tons; in Blount County, to 6,478 tons; and in Knox County, to 6,143 tons. In the whole State 123,270 tons of shredded fodder were put up that year. There were 3,374,574 acres of corn cultivated, however, every acre of which should yield $1\frac{1}{2}$ tons of corn stover. The yield of corn stover on this basis would be 5,061,861 tons; so that 4,938,591 tons were either fed in the field or allowed to waste altogether. When fed in the field, not more than one-third of its feeding value would be obtained. It is quite evident from these figures that there is enough shredded stover and corn produced in the State, if properly utilized, to permit of the profitable winter feeding of all the beef cattle produced in the State and allow for a generous increase besides.

CENTER OF COTTON PRODUCTION.

COUNTY.	Bales.	Lint Cotton— Pounds.	Seed Cotton— Pounds.
Shelby	39,175	19,587,500	39,175,000
Fayette	25,881	12,940,500	25,881,000
Tipton	25,604	12,802,000	25,604,000
Lauderdale	15,929	7,964,500	15,929,000
Haywood	15,914	7,957,000	15,914,000
Hardeman	13,197	6,598,500	13,197,000
Madison	12,488	6,244,000	12,488,000

This table is calculated on the basis of 2 pounds of seed cotton for 1 pound of lint.

While the production of wheat in the State now barely suffices for the needs of our own people and the growth of the other winter cereals is as yet insignificant, there is another great concentrate produced in the State which is not utilized to any considerable extent as yet in the

winter feeding of beef cattle. Coupled with the corn crop produced and which the State is capable of producing and the large increase that might be had in the production of cotton if the lands are improved through the winter feeding of beef cattle and the return of the droppings to the soils on the cotton farms, there is practically no limit to the amount of cheap concentrates that may be had for winter feeding, once the farmers come to realize the importance of the industry.

According to the foregoing table, the largest cotton-producing county in the State is Shelby, which made 39,175 bales in 1899; Fayette came second, with 25,881 bales; Tipton came third, with 25,604 bales; Lauderdale came fourth, with 15,929 bales; Haywood came fifth, with 15,914 bales; Hardeman came sixth, with 13,197 bales; and Madison came seventh, with 12,488 bales. These seven counties produced 148,188 bales of cotton, or three-fifths of the entire crop.

Returning to the table showing the center of the cattle industry, it appears that Shelby is the only county having any considerable interest in the business; yet these seven counties produced the equivalent of 2,646,214 bushels of corn—enough concentrates to make 15,877,284 pounds of beef, equivalent to 200 pounds of gain on 79,386 head of beef cattle, or 300 pounds of gain on 52,924 head of beef cattle in a 150-day feeding period; yet the largest number of beef cattle held by any one of these counties was by Shelby—namely, 8,293 head. In some of these counties there is practically no interest in beef cattle. The yield of lint cotton per acre in these counties could be greatly increased by improving the fertility of the soil, which can be most cheaply and effectively done through the feed of the by-products of the cotton plant in conjunction with the corn which these counties are capable of producing. It is noteworthy that the cotton seed produced in Shelby County was equivalent in feeding value to 700,000 bushels of corn, enough

to winter feed 21,000 head of beef cattle; while in Fayette County the cotton crop was equivalent to 462,160 bushels of corn, enough to winter feed 13,864 head of beef cattle for the period mentioned, while making a gain of 200 pounds.

THE CEREALS.

In addition to the corn and cotton crops which are now available, large yields of winter cereals—oats, barley, and rye—can be produced and utilized for feeding, not only acting as winter cover crops, but leaving the land free for the production of a summer crop of cowpea hay, soy beans, or even corn or sorghum for forage or silage. All that is necessary is to prepare the land well and seed these crops early in the fall in order to get proper yields from them and produce an abundance of cheap grain for combining with the cotton-seed meal and corn already produced for winter feeding.

THE SOY BEAN.

There is another crop that should also receive attention at the hands of the farmer, and that is the soy bean, which will yield on a fair type of land from 25 to 40 bushels per acre of grain, containing about 28 per cent of protein, or more than twice as much as wheat bran and about three times as much as corn. In addition, the soy bean will produce a larger amount of "roughness" than an acre of corn, and it is also of superior feeding value to shredded stover.

SILAGE CROPS.

Combination crops of cowpeas and corn or sorghum and velvet beans can be made into silage to the greatest advantage in the State. It need not cost in an average season more than \$1 per ton to make the silage, consisting of from 10 to 15 per cent of pea vines. The silage is thus not only unusually rich, but it can be utilized for either summer or winter feeding, and, if properly made, will produce larger gains, as experimental results referred to later will substantiate, than dry fodders alone. With

such an array of fine foods at the command of the feeder and taking into consideration the ease and cheapness with which they can be produced, there is no reason why the feeding of beef cattle should not be made a paramount industry in the State. The feeding of beef cattle will also enable the land to be put down in grass and stop the frightful soil washing which is now apparent on every hand and which has already ruined great sections of the country almost beyond redemption.

CHEAP GRAZING LANDS.

While many of the grasses which do best in the North may not take so kindly to our soil, there are others adapted to the South which are very successful, if not superior. Lands subject to washing can be put down in Bermuda grass to the greatest advantage; lands better situated can be seeded to redtop, orchard grass, and tall cat grass. The fescues can be used to advantage in our pasture lands; and, when properly treated, thousands of acres can be successfully cultivated in red and alsike clover, or, it may be, even in alfalfa. It is absolutely necessary that the farmers of the State put down vast areas of their land in grasses in order to preserve it, and it is best for them to get the densest turf they can. The objection to Bermuda grass, that it cannot be eradicated, is not worthy of serious consideration in view of the large destruction the erosion is now causing on many of our farms. The mere putting down of the grass in sod will enrich it, as all know who have attempted to cultivate corn or other crops after it, and it will enable us to maintain our beef cattle in good growing condition through the summer and a portion of the winter as well. Our stocker cattle are sold at a sacrifice. True, they may be produced on cheap lands and the farmer may think he cannot afford to feed them; but the difference between 3 cents and 5 cents per pound on all the animals sold in the State is too great a loss for the farmers to sustain. Then if these cattle can be fed suc-

cessfully in other States without advantages such as we enjoy, it is clearly evident that they should be kept at home. Every one knows that the finished product brings the highest price and shows the largest profit. One has to pay a high price for a watch or any other article requiring skill and care in the manufacture, and the difference is as proportionately great between the half-fattened steer of indifferent quality and one properly bred and "finished." Our farmers can no longer permit the several millions of dollars which they are losing through the present practice of disposing of their cattle to go further, because the time has come when every source of revenue must be fully developed if the farmer is to obtain a just reward for his labors.

In addition to these many reasons, there is an abundance of cheap land suitable for grazing, and for no other purpose, which used to be covered with timber, but which now has been cut off. Unless it is put down in sod, it will be entirely destroyed; and owing to its steep, rough nature, it is quite unsuited for agricultural purposes. Such lands are adjacent to almost every farm in the State. They can be purchased for a song and can be used for grazing purposes during the summer, while the richer, lower lands of the valleys are utilized for the production of grain and forage crops for winter feeding. In this way the farmer can raise and produce his own stock very cheaply—a manifest advantage, as he not only knows the quality of the stock, but is not forced to purchase at a good deal of trouble and expense each year.

CARRYING CAPACITY OF THE LAND.

The carrying capacity of Tennessee land when properly managed is surprising, and it is quite feasible to duplicate these results on thousands of acres of land in the State. The improvement of our meadows and pastures will not be a difficult matter when the soil is properly enriched by the use of barnyard manure and plenty of shade is pro-

vided to enable the production of Kentucky blue grass and orchard grass. The following figures relating to the carrying capacity of Tennessee lands were furnished through the courtesy of Hon. C. H. Nimson, of Bellevue Farms, Cranberry, N. C. Mr. Nimson went into this country and cleared the primeval forest at a cost of \$29.30 per acre, and has maintained it as a stock farm for many years, and so conserved all its original fertility. I quote his figures because they will be of unusual interest and value to the people of the State, and should convince them beyond all question of the momentous importance of the live-stock industry when properly developed and the marvelous carrying capacity of our soils when intelligently treated:

“Pasture No. 2, 34 acres, carried live weight of cattle and sheep, weighed in on May 1, 1902, 446 pounds to the acre.

“Pasture No. 3, 14 acres, a pasture used continuously summer and winter for sheep, with cattle added in summer, carried live weight, weighed in on May 1, 1902, 298 pounds to the acre.

“Pasture No. 5, 22 acres, a division also pastured summer and winter with sheep, and cattle added in summer, carried, weighed in on May 1, 1902, 230 pounds to the acre.

“Pasture No. 13, 20 acres, carried an average of 327 pounds live weight to the acre, weighed in on May 1, 1902.

“Pasture No. 18, 26 acres, carried 230 pounds to the acre, weighed in on May 1, 1902.

“In making up a record of cattle grazing, we found that 74 head of one-year-olds and two-year-olds pastured at the rate of 300 pounds to the acre (weighed in) gained in 111 days, 65 per cent; for the season of 5¹/₂ months, 80 per cent—the heifers gaining 79.3 per cent; the steers, 81.6 per cent.

“We feel very safe in estimating that our lands will carry, on an average, 275 pounds of live stock to the acre,

weighed in, and make an increase in a season's pasturage of 51½ months of from 75 per cent to 80 per cent."

DIFFICULTIES OF THE BUSINESS.

It has been urged that one of the principal drawbacks to the development of the stock industry in Tennessee is the cattle tick. As a matter of fact, the majority of counties in the State are above the quarantine line, and there is no reason why all should not enjoy perfect immunity from this pest if they take systematic steps with that end in view. If each county would appoint a live-stock inspector whose duty it is to exterminate the ticks, as can be done with comparative ease by destroying them on the cattle held on the various farms and by keeping infected cattle outside that county, the people of that section can soon be placed above the quarantine line, and then the present difficulty will disappear and the discrimination which now affects the business will be disposed of. Let the people understand that they are to blame entirely if this is the only drawback they can urge against the development of their stock interests. Railroad rates have been so exorbitant as to militate against the business. Better times are in sight, however, and the day is not far distant when packing houses will be established in this section of the South. As soon as our farmers demonstrate that they can produce cattle of good quality and in sufficient numbers, packing houses will come to their doors. If they are not willing to make some sacrifice in order to build up the industry, they must remain as they are. It is first necessary for any man to demonstrate what he can do before he can enlist the interest and sympathy of capitalists, and so the same rule holds with our farmers. Our people must first make the effort, even at some sacrifice, and all the profits will flow into their coffers.

It has been said that markets are not available; but there are four large and growing cities in Tennessee, and we are not far distant in the eastern part of the State from

Washington, Baltimore, and Philadelphia; in the middle part, from Louisville and Cincinnati; and in the western part, from St. Louis, and even Chicago. The market facilities are improving all the time; and if Virginia can develop a large stock business by taking the cattle from East Tennessee and winter feeding them, there is no reason why our own people should not and will not do the same thing as soon as they realize the value of the business.

RESULTS OF FEEDING BEEF CATTLE AT THE TENNESSEE EXPERIMENT STATION.

It has been said that our native cattle could not make profitable gains; that it was useless to try to feed them. If those of better quality are fed for 150 days, they will make satisfactory gains and show a fair profit. It is not a difficult matter to improve the quality of stock. Improved sires are being brought into every section of the State, and the first cross is effecting a very desirable change. After we have effected the improvement in blood, which is now being rapidly done, the cattle must be put on better pastures and receive better attention if they are to improve as rapidly as desired. These matters are entirely in the hands of the farmers; and if they fail to avail themselves of the natural advantages by which they are surrounded, they can be attributed only to their own negligence.

Some have stated that cattle feeding is not profitable; but if one goes out and studies the problem on many of the farms, he will be struck at once with the wasteful methods of feeding which largely prevail and which account for the small profits obtained. One-third of the food could frequently be saved and still make satisfactory gains, were the rations intelligently combined or the animals fed in a careful and economic way. The one-crop and two-crop system in vogue, which has been practiced so long, has also militated against the development of cattle

feeding, because there has not been enough grain and forage produced to make the business feasible.

None of these questions, however, are serious, and can all be disposed of as soon as the farmers make up their minds to encourage the industry on a businesslike basis. That even our native stock can be fed successfully in Tennessee is shown by the following table, which gives the results of feeding beef cattle at the Tennessee station for three years past. The table shows the number of days fed, the rations fed per 1,000 pounds, the gain at the end, the gain per group, the gain per day, the "roughness" and concentrates per pound of gain, the per cent of good meat, the value of the manure, and the net profit per group at high prices and low prices for food stuffs:

FEEDING TEST WITH BEEF CATTLE AT TENNESSEE EXPERIMENT STATION.

Group.	Days Fed.	RATIONS PER 1,000 LBS.	Beginning.	End.	Gain per Group —Lbs.	Gain per Day per Steer—Lbs.	“Roughness” per Lb.—Gain.	Concentrates per Lb.—Gain.	Per Cent of Good Meat.	Value of Manure.	NET PROFIT PER GROUP.	
											High Prices.	Low Prices.
EXPERIMENT FOR 1900.												
I.	91	{ Corn meal.....	3	11	640	1.8	7	3.7	53.00	\$18.98	\$17.60	\$28.12
		{ Pea hay.....	6	10	.....	.....	.....	.....	.....	.....	.....	.....
		{ Corn stover.....	8	6	.....	.....	.....	.....	.....	.....	.....	.....
II.	91	{ Corn meal.....	4	1-7	591	1.6	8.2	3.9	52.20	27.86	8.36	12.26
		{ Cotton-seed meal.....	4-7	5	.....	.....	.....	.....	.....	.....	.....	.....
		{ Cotton-seed bran.....	6-16	8	.....	.....	.....	.....	.....	.....	.....	.....
		{ Corn stover.....	8	6	.....	.....	.....	.....	.....	.....	.....	.....
EXPERIMENT FOR 1901.												
III.	120	{ Corn meal.....	4	8	605	1.3	10.3	4.8	55.30	27.47	12.42	26.34
		{ Pea hay.....	6	9	.....	.....	.....	.....	.....	.....	.....	.....
		{ Corn stover.....	8	6	.....	.....	.....	.....	.....	.....	.....	.....
IV.	120	{ Corn meal.....	4	8	523	1.1	6.6	7.9	57.10	30.05	12.12	21.91
		{ Cotton-seed meal.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....
		{ Corn stover.....	8	8	.....	.....	.....	.....	.....	.....	.....	.....
V.	120	{ Corn meal.....	4	8	728	1.5	23.7	4.2	56.20	23.28	13.22	26.70
		{ Sorghum silage.....	30	30c	.....	.....	.....	.....	.....	.....	.....	.....
		{ Pea hay.....	6	4	.....	.....	.....	.....	.....	.....	.....	.....
VI.	120	{ Corn meal.....	4	8	740	2.1	18.7	4.5	57.50	25.34	16.29	25.43
		{ Cotton-seed meal.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....
		{ Sorghum silage.....	30	46c	.....	.....	.....	.....	.....	.....	.....	.....
EXPERIMENT FOR 1902.												
VII.	120	{ Corn meal, 1..... }	5	9	886	1.9	16.9	4.1	56.50	39.81	28.91	37.55
		{ Cotton-seed meal, 2..... }	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		{ Pea hay..... }	6	4	.....	.....	.....	.....	.....	.....	.....	.....
		{ Corn silage..... }	30	30	.....	.....	.....	.....	.....	.....	.....	.....
VIII.	120	{ Corn meal, 1..... }	5	9	705	1.5	7.8	5.2	55.20	42.27	24.62	35.92
		{ Cotton-seed meal, 2..... }	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		{ Pea hay..... }	6	6	.....	.....	.....	.....	.....	.....	.....	.....
		{ Stover..... }	8	7	.....	.....	.....	.....	.....	.....	.....	.....
IX.	120	{ Cotton-seed meal, 52..... }	4	9	662	1.4	23.9	5.3	54.60	41.91	28.21	34.53
		{ Cotton-seed bran, 48..... }	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		{ Pea hay..... }	7	5	.....	.....	.....	.....	.....	.....	.....	.....
		{ Corn silage..... }	30	30	.....	.....	.....	.....	.....	.....	.....	.....
X.	120	{ Cotton-seed meal, 52..... }	4	9	422	1.2	9.8	6.2	53.90	32.26	23.50	27.94
		{ Cotton-seed bran, 48..... }	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		{ Pea hay..... }	7	7	.....	.....	.....	.....	.....	.....	.....	.....
		{ Stover..... }	8	7	.....	.....	.....	.....	.....	.....	.....	.....

This table is worthy of careful study and consideration at the hands of our farmers. It shows that native cattle on a ration of corn meal, cotton-seed meal, and silage will make as much as two pounds of gain per day for a feeding period of 120 days; that when fed corn meal, cotton-seed meal, pea hay, and silage, they will also make excel-

lent gains—in the experiment quoted, 1.9 pounds per head per day. The poorest gains by any group for a long feeding period were made on corn meal, pea hay, and corn stover, and corn meal, cotton-seed meal, and corn stover; but even these gains for stocker cattle run through the winter to be finished on grass would prove satisfactory. The per cent of good meat obtained from these animals was also encouraging, and the value of the manure is an item not to be overlooked. The profits shown per group, even with such high prices as prevailed in 1901 and 1902, were still satisfactory; and if the farm price of these food stuffs is considered, and not the market price when delivered in the large towns and cities, the profit is still highly satisfactory.

There is everything, then, to encourage the feeding of beef cattle on rations that can be produced on Tennessee farms. As the quality of stock improves, the profits shown will be largely increased. These figures have been obtained as a result of careful and prolonged investigations, and they are certainly reliable. The results stated are always minimized on purpose, so they may never prove misleading.

A careful study of the above table should encourage many of our farmers to give this business their serious consideration.

INVESTIGATIONS AT THE TENNESSEE EXPERIMENT STATION IN 1902, 1903.

To further inform the farmers about the value of the business, feeding investigations have been undertaken this year at the station with 32 head of cattle, 16 head of which have already been put on high-pressure feed to be sold as beef cattle in the spring, and 16 head are to be run through on very cheap "roughness" and a light grain ration and put on pasture the following summer and sold as export cattle next fall. The idea is to compare the two methods

of feeding for Tennessee conditions and see which will be most profitable to the farmer.

There is much to be learned about selecting feeders. The animals intended for this purpose should have a good spring of ribs, a short middle piece, heavily-fleshed quarter, and a refined head and intelligent expression. They should be uniform in color whenever possible and be fed in large enough numbers to permit their being shipped in car-load lots, if necessary. The winter treatment of the cattle is a very simple matter. Cheap, shedlike barns can be erected at but a small cost. All that is needed is some place to protect the manure from leaching and give the animals plenty of room for exercise and provide a suitable manger for feeding and protection from inclement weather, the severe rains of the winter being even worse on them than our very cold weather. A shed capable of feeding 40 or 50 head of cattle can be erected for about \$500 out in the country where labor and lumber are cheap. The provision of barns, buildings, and silos will never be a serious obstacle to the development of cattle feeding, and the investment required to provide buildings admirably adapted to the purpose is very small indeed, and is within the reach of very many of our farmers.

CONCLUSION.

In conclusion, it may be well to state that feeding beef cattle will be more profitable in the future than in the past, because of our rapidly-increasing population and the breaking up of the ranching system in the West, which means that the cattle industry must be carried on more largely on the small farms in the future. Then our own population in Tennessee and the Southeastern States promises to increase rapidly in the next decade. Manufacturing industries are coming in large numbers, and coal, iron, and other mineral resources are being developed very rapidly. This means that better prices will prevail for beef,

that we will have a larger population to feed, and that we must produce far more meat in the future in order to supply the demand of our home market. For these reasons the outlook for the future of the business is very encouraging indeed.

TENNESSEE BY DIVISIONS AND COUNTIES.

The purpose of the following descriptive and statistical matter is to enable the reader to see at a glance the kind, character, and amount of the products of each particular county, as well as to gather a general idea of the adaptability of the county to any particular pursuit. The statistical tables were compiled from the census reports for 1900, and they embrace statistics of the most important products of each county in the State. The counties are arranged in alphabetical order by grand divisions, beginning with

EAST TENNESSEE.

ANDERSON COUNTY.

Population in 1900, 17,634; population in 1890, 15,128. This county has an estimated area of 360 square miles, and is drained by the Clinch and Powell Rivers. Cumberland Mountain occupies a part of the county. Its valleys are very fertile. Wheat, corn, and oats are the staple products. Oak, hickory, and sugar maple abound in its forests. The county is traversed by the Southern Railway.

The county seat, Clinton, lies on the west bank of the Clinch River, 22 miles northwest of Knoxville; and it has several churches, flouring mills, a tannery, and a weekly newspaper. The population of the town was 1,111 under the census of 1900.

The assessed value of land in 1900 was \$6.90 per acre.

Number of manufacturing establishments in the county, 70; capital employed, \$224,389; amount of wages paid

during the year, \$40,512; number of farms, 1,595; number of acres, 180,291; number of acres improved, 70,295; value of buildings, \$386,100; value of farming implements and machinery, \$85,620; value of live stock, \$378,428; value of products not fed to live stock, \$491,557; amount paid for farm labor during the year, \$26,260; total value of land and improvements, except buildings, \$1,381,210.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	379,380	Clover	867
Wheat	26,330	Other cultivated grasses ..	3,757
Oats	29,830	Grains cut green for hay..	1,278
Other cereals	1,260	Other forage crops....	2,436
Potatoes	19,147	Sorghum cane sold	39
Sweet potatoes	22,377		
Onions	3,480	Sorghum sirup (gallons)..	22,126
Beans	1,471	Cotton (bales)	2
Peas	3,008	Tobacco (pounds)	28,070
Value of other vegetables..	\$26,201	Broom corn (pounds)....	2,180
Clover seed	21	Grapes (pounds)	44,300
Other grass seed	226		
Peanuts	70		
Apples	57,062		
Plums and prunes....	9		
	TONS.		
Wild grasses	428		
Millet	1,589		

NUMBER OF FRUIT TREES.

Apple	91,967
Plum and prunes	14
Grapevines	6,474
Value of forest products..	\$ 100
Value of small fruits....	2,585

POULTRY AND BEES.

Value of poultry on hand	\$ 13,867 00
Value of poultry raised in 1899	27,354 00
Dozens of eggs produced in 1899	245,900
Value of bees on hand	6,908 00
Pounds of honey produced in 1899	29,920
Pounds of wax produced in 1899	830

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 67,890 00
Animals slaughtered	58,517 00
Total	\$126,407 00

LIVE STOCK ON HAND.

Cattle	7,933	Horses	2,656
Sheep	2,665	Mules	1,459
Hogs	14,342	Asses and burros	39

BLEDSOE COUNTY.

Population in 1900, 6,626; population in 1890, 6,134. This is one of the mountainous counties of the State, and has an area of 300 square miles. It is drained by the Sequatchie River and its tributaries. Its surface is somewhat mountainous. Cattle, hogs, and fruit are the principal products of the county. It has fine timber, consisting of poplar, ash, oak, pine, lin, chestnut, and hickory. The pasturage for cattle and sheep is good. Coal and limestone abound in the county. Corn, oats, and wheat are successfully grown throughout the county.

Pikeville is the county seat, and it is situated near the Cumberland Mountain.

The average assessed value of land in 1900 was \$2.33 per acre.

Number of manufacturing establishments in the county, 25; capital employed, \$57,592; amount of wages paid during the year, \$4,692; number of farms, 984; number of acres, 140,101; number of acres improved, 50,493; value of buildings, \$235,040; value of farming implements and machinery, \$57,730; value of live stock, \$321,440; value of products not fed to live stock, \$392,626; amount paid for farm labor during the year, \$18,900; total value of land and improvements, except buildings, \$1,102,790.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	317,110	Other forage crops	5,893
Wheat	43,790	Sorghum cane sold	1
Oats	12,230	Sorghum sirup (gallons)..	11,944
Other cereals	403	Cotton (bales)	4
Potatoes	15,625	Tobacco (pounds)	16,110
Sweet potatoes	6,573	Broom corn (pounds)....	2,180
Onions	520	Dried fruit (pounds)....	13,260
Beans	416	Grapes (pounds)	26,526
Peas	4,182	Wine (gallons)	10
Value of other vegetables..	\$14,000	Cider (barrels)	24
Peanuts	31	Vinegar (barrels)	22
Apples	33,415		
Cherries	9		
Pears	49		
Plums and prunes	242		
	TONS.		
Wild grasses	124		
Millet	226		
Clover	177		
Other cultivated grasses..	2,012		
Grains cut green for hay..	1,311		

NUMBER OF FRUIT TREES.

Apple	107,768
Cherry	2,362
Peach	12,122
Pear	1,334
Plum and prune	2,135
Grapevines	2,122
Value of forest products..	\$19,363
Value of small fruits	1,000

POULTRY AND BEES.

Value of poultry on hand	\$ 7,211 00
Value of poultry raised in 1899	13,263 00
Dozens of eggs produced in 1899	109,550
Value of bees on hand	6,307 00
Pounds of honey produced in 1899	24,330
Pounds of wax produced in 1899	770

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 81,215 00
Animals slaughtered	37,780 00
Total	\$118,995 00

LIVE STOCK ON HAND.

Cattle	8,107	Horses	1,228
Sheep	4,863	Mules	866
Hogs	15,643	Asses and burros	27

BLOUNT COUNTY.

Population in 1900, 19,206; population in 1890, 17,589. This county has an area of 614 square miles. The Holston River, which is navigable for steamboats, bounds the county on the northwest; the Little Tennessee River flows through the county. The surface of the county is mountainous, with fertile valleys, which produce wheat, corn, oats, and fruit as staple products. The county has splendid forests of oak and pine, and marble and iron ore are both found in profitable quantities.

Maryville, the county seat, is on the Knoxville and Augusta Railroad. It has good churches, public schools, and colleges.

The average assessed value of land is \$5.25 per acre.

Number of manufacturing establishments in the county, 75; capital employed, \$375,166; amount of wages paid during the year, \$55,569; number of farms, 2,161; number of acres, 277,982; number of acres improved, 131,944; value of buildings, \$633,750; value of farming implements and machinery, \$184,070; value of live stock, \$612,447; value of products not fed to live stock, \$912,555; amount paid for farm labor during the year, \$42,660; total value of land and improvements, except buildings, \$2,447,520.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	608,900	Grains cut green for hay..	2,602
Wheat.....	157,500	Other forage crops.....	9,598
Oats.....	49,520	Sorghum cane sold.....	5
Other cereals	460	Sorghum sirup (gallons)..	38,014
Potatoes.....	9,236	Cotton (bales).....	7
Sweet potatoes	27,413	Tobacco (pounds).....	19,650
Onions.....	1,963	Broom corn (pounds)....	2,990
Beans.....	753	Dried fruit (pounds).....	17,140
Peas.....	13,800	Grapes (pounds).....	135,951
Value of other vegetables..	\$36,030	Wine (gallons).....	84
Clover seed.....	31	Cider (barrels).....	55
Other grass seed.....	16	Vinegar (barrels).....	30
Peanuts	633		
Apples.....	66,892	NUMBER OF FRUIT TREES.	
Cherries.....	49	Apple	110,067
Peaches	32	Cherry	2,647
Pears.....	353	Peach.....	40,838
Plums and prunes	325	Pear	2,199
	TONS.	Plum and prune	4,059
Wild grasses.....	495	Grapevines	15,499
Millet.....	2,687	Value of forest products..	\$51,239
Clover....	1,829	Value of small fruits.....	1,504
Other cultivated grasses..	1,413		

POULTRY AND BEES.

Value of poultry on hand....	\$ 19,622 00
Value of poultry raised in 1899.....	42,489 00
Dozens of eggs produced in 1899.....	315,820
Value of bees on hand.....	7,507 00
Pounds of honey produced in 1899.....	35,530
Pounds of wax produced in 1899.....	770

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$188,193 00
Animals slaughtered	80,903 00
Total	\$269,096 00

LIVE STOCK ON HAND.

Cattle.....	12,994	Horse.....	4,299
Sheep.....	5,252	Mules.....	2,008
Hogs.....	24,398	Asses and burros.....	31

BRADLEY COUNTY.

Population in 1900, 15,759; population in 1890, 13,607. This county borders on Georgia, and has an area of 280 square miles. The Hiwassee River flows along the northeast boundary of the county. The surface is hilly and well timbered; the soil is fertile. Wheat, corn, and live stock are the leading products. The county is rapidly coming to the front in fruit growing, especially apples, peaches, and strawberries. The soil and climate are well adapted to all kinds of fruit.

The county seat, Cleveland, is situated on the Southern Railway. It is well supplied with churches and schools. It has one of the largest chair factories in the South, a large woolen mill and trousers factory, a stove foundry, and the largest coffin factory in the State. The town has an electric light plant and several national banks.

The average price of improved land is \$15 per acre; unimproved land can be purchased from \$2 to \$5 per acre. The extremely low price of land, the good schools established in this county, the healthfulness of the climate, and the productiveness of the soil offer special inducements.

Number of manufacturing establishments in the county, 84; capital employed, \$364,385; amount of wages paid during the year, \$129,433; number of farms, 1,728; number of acres, 192,081; number of acres improved, 93,040; value of buildings, \$476,850; value of farming implements and machinery, \$133,210; value of live stock, \$393,091; value of products not fed to live stock, \$524,636; amount paid for farm labor during the year, \$17,830; total value of land and improvements, except buildings, \$1,405,600.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	503,660	Grains cut green for hay .	1,703
Wheat	79,440	Other forage crops	2,887
Oats	7,840	Sorghum cane sold	51
Other cereals	292		
Potatoes	5,372	Sorghum sirup (gallons) ..	15,717
Sweet potatoes	16,304	Cotton (bales)	231
Onions	1,005	Tobacco (pounds)	12,170
Beans	311	Broom corn (pounds) . . .	580
Peas	11,520	Dried fruit (pounds)	890
Value of other vegetables ..	\$16,050	Grapes (pounds)	47,465
Clover seed	2	Wine (gallons)	77
Peanuts	48	Cider (barrels)	6
Apples	9,463	Vinegar (barrels)	6
Cherries	7		
Peaches	327	NUMBER OF FRUIT TREES.	
Pears	80	Apple	69,589
Plums and prunes	108	Cherry	963
		Peach	48,453
		Pear	2,450
		Plum and prune	2,803
		Grapevines	10,698
		Value of forest products ..	\$21,387
		Value of small fruits	2,365
	TONS.		
Wild grasses	185		
Millet	695		
Clover	547		
Other cultivated grasses ..	3,032		

POULTRY AND BEES.

Value of poultry on hand	\$ 14,160 00
Value of poultry raised in 1899	21,719 00
Dozens of eggs produced in 1899	224,400
Value of bees on hand	4,045 00
Pounds of honey produced in 1899	19,240
Pounds of wax produced in 1899	340

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 43,860 00
Animals slaughtered	56,742 00
Total	\$100,602 00

LIVE STOCK ON HAND.

Cattle	6,202	Horses	2,661
Sheep	3,266	Mules	1,832
Hogs	11,342	Asses and burros	87

CAMPBELL COUNTY.

Population in 1900, 17,317; population in 1890, 13,486. This county borders on Kentucky, and has an area of 488 square miles. The Clinch River flows along its southeast border; several small streams drain the county, emptying into the Cumberland River. The surface of the county is somewhat mountainous and covered with fine forests. The Southern Railway traverses the county through Jellico to Knoxville. The staple products are corn, oats, and grass. Rich bituminous coal deposits are found in the county.

Jacksboro, the county seat, is near the Knoxville and Ohio Railroad, 33 miles from Knoxville. Coal mines are in operation near this place. It has general stores, churches, and schools. Its population in 1900 was 621.

The average assessed value of land is \$5.65 per acre.

Number of manufacturing establishments in the county, 83; capital employed, \$195,939; amount of wages paid during the year, \$44,172; number of farms, 1,834; number of acres, 167,969; number of acres improved, 68,392; value of buildings, \$328,170; value of farming implements and machinery, \$67,010; value of live stock, \$384,623; value of products not fed to live stock, \$477,508; amount paid for farm labor during the year, \$18,710; total value of land and improvements, except buildings, \$1,031,660.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	339,330	Grains cut green for hay ..	395
Wheat	19,520	Other forage crops	2,887
Oats	43,900	Sorghum cane sold	49
Other cereals	346	Sorghum sirup (gallons) ..	11,284
Potatoes	21,471	Cotton (bales)	8
Sweet potatoes	13,739	Tobacco (pounds)	7,680
Onions	2,060	Broom corn (pounds)	3,450
Beans	1,375	Dried fruit (pounds)	9,240
Peas	908	Grapes (pounds)	15,422
Value of other vegetables ..	\$21,638	Wine (gallons)	18
Clover seed	2	Cider (barrels)	30
Peanuts	32	Vinegar (barrels)	13
Apples	77,636	NUMBER OF FRUIT TREES.	
Cherries	107	Apple	74,392
Peaches	218	Cherry	1,684
Pears	341	Peach	12,683
Plums and prunes	564	Pear	845
	TONS.	Plum and prune	3,462
Wild grasses	41	Grapevines	1,201
Millet	1,678	Value of forest products ..	\$48,955
Clover	1,086	Value of small fruits	802
Other cultivated grasses ..	1,715		

POULTRY AND BEES.

Value of poultry on hand	\$ 13,310 00
Value of poultry raised in 1899	27,141 00
Dozens of eggs produced in 1899 ..	173,680
Value of bees on hand	8,392 00
Pounds of honey produced in 1899 ..	60,660
Pounds of wax produced in 1899	490

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 65,343 00
Animals slaughtered	65,336 00
Total	\$130,679 00

LIVE STOCK ON HAND.

Cattle	8,081	Horses	2,044
Sheep	3,759	Mules	1,375
Hogs	13,929	Asses and burros	14

CARTER COUNTY.

Population in 1900, 16,688; population in 1890, 13,389. This county has an area of about 298 square miles. The Watauga River flows through the county, and the Iron Mountain constitutes the southeastern boundary. Its surface is mountainous, with fertile valleys, and it is well timbered. Corn, oats, grass, and live stock are the staple products. There is an abundance of iron ore in the county. It is traversed by the East Tennessee and Western North Carolina Railroad.

The county seat is Elizabethton, located east of Johnson City. It has churches, a school, a bank, and woolen mills.

The average assessed value of land is \$4.73 per acre.

Number of manufacturing establishments in the county, 74; capital employed, \$286,068; amount of wages paid during the year, \$63,825; number of farms, 2,027; number of acres, 134,838; number of acres improved, 55,637; value of buildings, \$506,770; value of farming implements and machinery, \$79,750; value of live stock, \$311,614; value of products not fed to live stock, \$544,014; amount paid for farm labor during the year, \$29,870; total value of land and improvements, except buildings, \$1,598,560.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn ..	271,750	Other cultivated grasses...	2,808
Wheat.....	83,880	Grains cut green for hay..	355
Oats.....	56,360	Other forage crops.....	739
Other cereals	3,770	Sorghum cane sold.....	57
Potatoes.....	26,326	Sorghum sirup (gallons)..	19,538
Sweet potatoes.....	8,737	Tobacco (pounds).....	6,920
Onions.....	2,863	Broom corn (pounds)	2,660
Beans.....	2,087	Dried fruit (pounds).....	91,710
Peas.....	291	Grapes (pounds)	57,414
Value of other vegetables..	\$22,185	Wine (gallons)	119
Clover seed.....	48	Cider (barrels)	141
Other grass seed ..	52	Vinegar (barrels)... ..	116
Peanuts.....	7		
Apples	202,899	NUMBER OF FRUIT TREES.	
Cherries.....	262	Apple.....	187,182
Peaches.....	1,158	Cherry	2,356
Pears.....	184	Peach.....	15,038
Plums and prunes.....	54	Pear	748
	TONS.	Plum and Prune.....	773
Wild grasses	4	Grapevines.....	2,784
Millet.....	714	Value of forest products..	\$42,015
Clover.....	816	Value of small fruits.....	636

POULTRY AND BEES.

Value of poultry on hand.....	\$ 15,578 00
Value of poultry raised in 1899	37,461 00
Dozens of eggs produced in 1899....	197,360
Value of bees on hand.....	7,921 00
Pounds of honey produced in 1899	64,060
Pounds of wax produced in 1899.....	1,570

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 54,096 00
Animals slaughtered..	58,672 00
Total	\$112,768 00

LIVE STOCK ON HAND.

Cattle	6,482	Horses	1,942
Sheep.....	3,194	Mules.....	813
Hogs.....	10,354	Asses and burros.....	19

CLAIBORNE COUNTY.

Population in 1900, 20,696; population in 1890, 15,103. The area of this county is about 472 square miles. The Powell River intersects the county, and the Clinch River bounds it on the southeast. Cumberland Mountain constitutes the northwest border of the county. The surface is generally mountainous and well covered with timber. The soil in the valleys is fertile. Wheat, corn, oats, and grass are the staple products. Iron, zinc, and lead ores are found in the county. The Knoxville, Cumberland Gap and Louisville Railroad intersects the county.

Tazewell, the county seat, has schools, churches, and a weekly newspaper. Coal is found near the town.

The average assessed value of land is \$4.41 per acre.

Number of manufacturing establishments in the county, 67; capital employed, \$163,736; amount of wages paid during the year, \$27,094; number of farms, 2,809; number of acres, 222,536; number of acres improved, 113,634; value of buildings, \$493,220; value of farming implements and machinery, \$89,240; value of live stock, \$562,313; value of products not fed to live stock, \$768,080; amount paid for farm labor during the year, \$22,210; total value of land and improvements, except buildings, \$1,438,580.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	553,300	Grains cut green for hay ..	369
Wheat.....	50,150	Other forage crops.	2,835
Oats	60,140	Sorghum cane sold.....	1
Other cereals	249		
Potatoes.....	28,699	Sorghum sirup (gallons)..	21,679
Sweet Potatoes	22,388	Cotton (bales).....	2
Onions	3,536	Tobacco (pounds).....	35,500
Beans	1,004	Broom corn (pounds)....	5,760
Peas.....	414	Dried fruit (pounds)	76,160
Value of other vegetables..	\$27,388	Grapes (pounds)	23,817
Clover seed	13	Wine (gallons).....	102
Other grass seed.....	168	Cider (barrels).....	73
Peanuts	42	Vinegar (barrels).....	73
Apples	93,011		
Cherries.....	116		
Peaches	385		
Pears	285		
Plums and prunes.....	389		
	TONS.		
Wild grasses	39		
Millet.....	879		
Clover.....	952		
Other cultivated grasses..	3,570		

NUMBER OF FRUIT TREES.

Apple	112,019
Cherry	1,976
Peach	25,765
Pear	1,644
Plum and prune	2,588
Grapevines.....	1,989

Value of forest products..	\$62,486
Value of small fruits....	1,957

POULTRY AND BEES.

Value of poultry on hand...	\$ 20,459 00
Value of poultry raised in 1899.....	56,047 00
Dozens of eggs produced in 1899.....	310,660
Value of bees on hand.....	11,403 00
Pounds of honey produced in 1899.....	60,700
Pounds of wax produced in 1899.....	1,520

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$122,658 00
Animals slaughtered.....	98,074 00
Total	\$220,732 00

LIVE STOCK ON HAND.

Cattle	4,267	Horses	1,609
Sheep.....	1,423	Mules.....	315
Hogs.....	12,980	Asses and burros.....	24

COCKE COUNTY.

Population in 1900, 19,153; population in 1890, 16,523. This county has an area of about 458 square miles. The French Broad River intersects the county, and the Nolachucky River bounds it on the north. Smoky Mountain extends along the southeastern border of the county, and this section is covered with timber. The soil in the valleys is very fertile. The staple products are corn, wheat, and grass. The Southern Railway passes through the county.

The county seat is Newport, situated on the Big Pigeon River and the Southern Railway, 50 miles east of Knoxville. It has several churches, an electric light plant, a flour mill, and a weekly newspaper.

The average assessed value of land in 1900 was \$6.22 per acre.

Number of manufacturing establishments in the county, 73; capital employed, \$550,883; amount of wages paid during the year, \$42,790; number of farms, 2,534; number of acres, 216,048; number of acres improved, 107,441; value of buildings, \$444,000; value of farming implements and machinery, \$109,570; value of live stock, \$518,115; value of products not fed to live stock, \$737,800; amount paid for farm labor during the year, \$32,750; total value of land and improvements, except buildings, \$1,873,810.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn.....	588,310	Grains cut green for hay..	167
Wheat	131,450	Other forage crops	1,916
Oats.....	23,180	Sorghum cane sold	159
Other cereals.....	1,624		
Potatoes.....	13,811	Sorghum sirup (gallons) .	22,740
Sweet potatoes.....	15,947	Cotton (bales).....	9
Onions.....	998	Tobacco (pounds).....	86,830
Beans.....	1,394	Broom corn (pounds).....	14,950
Peas.....	4,832	Dried fruit (pounds).....	28,570
Value of other vegetables..	\$28,070	Grapes (pounds)	44,985
Clover seed.....	304	Wine (gallons) .	151
Other grass seed.....	130	Cider (barrels).....	151
Peanuts.....	57	Vinegar (barrels).....	114
Apples.....	89,258		
Cherries.....	41		
Peaches.....	261		
Pears.....	637		
Plums and prunes.....	200		
	TONS.		
Wild grasses.....	14		
Millet.....	635		
Clover.....	1,273		
Other cultivated grasses..	2,217		

NUMBER OF FRUIT TREES.

Apple.....	82,269
Cherry	1,705
Peach.....	23,414
Pear.....	1,036
Plum and prune.....	1,499
Grapevines	3,053

Value of forest products..	\$32,962
Value of small fruits.....	694

POULTRY AND BEES.

Value of poultry on hand.....	\$ 22,813 00
Value of poultry raised in 1899.....	55,755 00
Dozens of eggs produced in 1899.....	321,160
Value of bees on hand.....	7,019 00
Pounds of honey produced in 1899.....	31,960
Pounds of wax produced in 1899.....	640

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$168,310 00
Animals slaughtered.....	67,291 00
Total	\$235,601 00

LIVE STOCK ON HAND.

Cattle.....	10,659	Horses	2,799
Sheep.....	3,295	Mules.....	1,454
Hogs.....	22,077	Asses and burros.....	17

GRAINGER COUNTY.

Population in 1900, 15,512; population in 1890, 13,196. This county has an area of about 300 square miles. It is bounded on the northwest by the Clinch River; on the south, by the Holston River. It has a high-ridge surface called "Clinch Mountain." The county is well timbered. The soil in the valley is very fertile; and corn, oats, wheat, grass, cattle, mules, and hogs constitute the staple products. Fine iron-ore deposits are found in the county. It is intersected by the Middlesboro branch of the Southern Railway and by the Knoxville and Bristol Railroad. There are many noted mineral springs in this county. The average value of improved lands is about \$10 per acre.

Rutledge, the county seat, is located near the base of Clinch Mountain, about 33 miles northeast of Knoxville, and has good churches and schools.

The average assessed value of land in 1900 was \$6.53 per acre.

Number of manufacturing establishments in the county, 45; capital employed, \$60,188; amount of wages paid during the year, \$10,265; number of farms, 2,069; number of acres, 177,829; number of acres improved, 103,479; value of buildings, \$520,800; value of farming implements and machinery, \$104,360; value of live stock, \$430,556; value of products not fed to live stock, \$639,648; amount paid for farm labor during the year, \$34,420; total value of land and improvements, except buildings, \$1,319,860.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS.
Corn.....	510,500	Grains cut green for hay..	939
Wheat.....	116,760	Other forage crops.....	2,473
Oats.....	26,190	Sorghum cane sold.....	11
Other cereals.....	280	Sorghum sirup (gallons)..	11,310
Potatoes.....	15,157	Cotton (bales).....	2
Sweet potatoes.....	15,153	Tobacco (pounds).....	17,740
Onions.....	2,204	Broom corn (pounds)....	2,300
Beans.....	593	Dried fruit (pounds)....	11,740
Peas.....	990	Grapes (pounds).....	19,894
Value of other vegetables..	\$18,824	Wine (gallons).....	111
Clover seed.....	106	Cider (barrels).....	112
Other grass seed.....	162	Vinegar (barrels).....	98
Peanuts.....	39		
Apples.....	70,903		
Cherries.....	92		
Peaches.....	302		
Pears.....	445		
Plums and prunes.....	523		
	TONS.		
Wild grasses.....	29		
Millet.....	1,141		
Clover.....	614		
Other cultivated grasses...	1,585		

NUMBER OF FRUIT TREES.

Apple.....	73,828
Cherry.....	891
Peach.....	9,198
Pear.....	950
Plum and prune.....	1,330
Grapevines.....	775
Value of forest products..	\$31,412
Value of small fruits.....	878

POULTRY AND BEES.

Value of poultry on hand.....	\$ 21,554 00
Value of poultry raised in 1899.....	45,368 00
Dozens of eggs produced in 1899.....	312,640
Value of bees on hand.....	5,544 00
Pounds of honey produced in 1899.....	22,770
Pounds of wax produced in 1899.....	980

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$94,504 00
Animals slaughtered.....	82,811 00
Total.....	\$177,315 00

LIVE STOCK ON HAND.

Cattle.....	7,769	Horses.....	2,975
Sheep.....	3,767	Mules.....	1,253
Hogs.....	15,239	Asses and burros.....	30

GREENE COUNTY.

Population in 1900, 30,596; population in 1890, 26,614. This county borders on North Carolina, and has an area of about 580 square miles. It is intersected by the Nolachucky River and drained by it and Lick Creek. Its surface is partly mountainous and well timbered. Its valleys are fertile; and the staple products are corn, wheat, oats, grass, tobacco, and pork. The Southern Railway intersects the county. Fine deposits of iron ore and Silurian limestone are found in this county.

Greeneville, the county seat, is on the Southern Railway, and is one of the most progressive towns in East Tennessee. It has fine churches, an electric light plant, well-equipped newspaper offices, banks, and business houses.

The average assessed value of land in 1900 was \$5.78 per acre.

Number of manufacturing establishments in the county, 108; capital employed, \$376,644; amount of wages paid during the year, \$50,054; number of farms, 4,188; number of acres, 355,948; number of acres improved, 229,823; value of buildings, \$1,266,850; value of farming implements and machinery, \$270,450; value of live stock, \$1,016,556; value of products not fed to live stock, \$1,396,985; amount paid for farm labor during the year, \$65,260; total value of land and improvements, except buildings, \$3,830,430.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	761,530	Grains cut green for hay ..	571
Wheat.....	325,030	Other forage crops.	6,747
Oats.....	72,120	Sorghum cane sold	228
Other cereals	1,310		
Potatoes.....	21,566	Sorghum sirup (gallons)..	35,195
Sweet potatoes.....	27,587	Tobacco (pounds).....	517,150
Onions	2,451	Broom corn (pounds)....	9,610
Beans	663	Dried fruit (pounds).....	88,380
Peas	1,172	Grapes (pounds)	66,718
Value of other vegetables..	\$53,285	Wine (gallons)	111
Clover seed.....	854	Cider (barrels).....	496
Other grass seed	367	Vinegar (barrels)	412
Peanuts	51		
Apples	189,437		
Cherries.....	879		
Peaches	1,736		
Pears.....	1,388		
Plums and prunes.....	161		
	TONS.		
Wild grasses.....	246		
Millet.....	1,433		
Clover.....	3,518		
Other cultivated grasses..	13,281		

NUMBER OF FRUIT TREES.

Apple	175,688
Cherry	4,316
Peach	60,263
Pear.....	2,747
Plum and prune	2,664
Grapevines	3,448
Value of forest products..	\$59,444
Value of small fruits	2,999

POULTRY AND BEES.

Value of poultry on hand.....	\$ 44,514 00
Value of poultry raised in 1899.....	126,725 00
Dozens of eggs produced in 1899	854,770
Value of bees on hand.....	14,144 00
Pounds of honey produced in 1899	58,920
Pounds of wax produced in 1899.....	880

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$234,522 00
Animals slaughtered.....	114,447 00
Total	\$348,969 00

LIVE STOCK ON HAND.

Cattle	21,254	Horses	8,090
Sheep.....	7,101	Mules.....	2,568
Hogs.....	29 501	Asses and burros.....	75

HAMBLETON COUNTY.

Population in 1900, 12,728; population in 1890, 11,418. This county is bounded on the northwest by the Holston River; on the south, by the French Broad River; and has an area of about 150 square miles. The surface is undulating, and the soil is fertile. The Southern Railway intersects the county. Grass, fruit, and live stock are the principal products of the county. It is one of the best fruit counties in the Eastern Division of the State.

Morristown, the county seat, is situated on the Holston River and the Southern Railway. It is a flourishing town, with a population of 2,973. It has splendid churches, good schools, numerous manufacturing establishments, several banks, many prosperous business houses, and several well-equipped newspaper establishments.

The average assessed value of land in the county in 1900 was \$10.81 per acre.

Number of manufacturing establishments in the county, 61; capital employed, \$172,651; amount of wages paid during the year, \$22,594; number of farms, 1,207; number of acres, 107,071; number of acres improved, 76,183; value of buildings, \$464,130; value of farming implements and machinery, \$101,660; value of live stock, \$338,828; value of products not fed to live stock, \$524,582; amount paid for farm labor during the year, \$34,520; total value of land and improvements, except buildings, \$1,385,170.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	347,859	Other cultivated grasses..	2,036
Wheat.....	142,010	Grains cut green for hay..	773
Oats	14,990	Other forage crops.....	1,145
Other cereals	120	Sorghum cane sold.....	104
Potatoes.....	8,815	Sorghum sirup (gallons).	11,922
Sweet potatoes.....	12,148	Tobacco (pounds).....	8,380
Onions.....	845	Broom corn (pounds).....	3,440
Beans	241	Dried fruit (pounds).....	10,740
Peas	900	Grapes (pounds).....	102,207
Value of other vegetables..	\$17,914	Wine (gallons).....	191
Clover seed.....	325	Cider (barrels).....	135
Other grass seed.....	3,229	Vinegar (barrels).....	111
Peanuts.....	60		
Apples	41,439	NUMBER OF FRUIT TREES.	
Cherries.....	103	Apple	51,118
Peaches	1,171	Cherry	930
Pears	866	Peach.....	11,274
Plums and prunes.....	169	Pear	1,447
	TONS.	Plum and prune.....	1,287
Wild grasses	11	Grapevines	19,961
Millet	1,755	Value of forest products..	\$29,466
Clover	1,123	Value of small fruits.....	2,863

POULTRY AND BEES.

Value of poultry on hand.....	\$ 16,140 00
Value of poultry raised in 1899.....	35,802 00
Dozens of eggs produced in 1899.....	219,820
Value of bees on hand.....	3,489 00
Pounds of honey produced in 1899.....	13,740
Pounds of wax produced in 1899.....	210

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 90,804 00
Animals slaughtered.....	40,284 00
Total.....	\$131,088 00

LIVE STOCK ON HAND.

Cattle.....	6,021	Horses	2,622
Sheep.....	1,037	Mules	988
Hogs.....	11,316	Asses and burros.....	25

HAMILTON COUNTY.

Population in 1900, 61,695; population in 1890, 53,482. This county has an area of 575 square miles. Cumberland Mountain occupies the northwestern part. It has a varied and fertile soil, well adapted to the growth of all kinds of crops, including the different grains, grasses, fruits, and vegetables. Truck farming is carried on to a considerable extent; and large quantities of beans, peas, onions, tomatoes—and, in fact, almost every known vegetable—are shipped from Chattanooga to the Northern markets. The truck farmer always finds a ready market at good prices, and the length of the growing season makes it possible sometimes to grow three crops in one year on the same ground. Fruit growing is receiving considerable attention, and is steadily growing in importance; and while other fruits can be grown to perfection, the growing of strawberries is the most important. Large shipments of this berry are made every year. The poultry and dairy business is also profitable to those engaged in it. Prices of farms are reasonable, varying from \$10 to \$100 per acre, according to the improvements and distance from the city and railway. The staple products are corn, wheat, oats, cattle, and hogs. Splendid mines of bituminous coal and iron ore are being actively operated. The county is traversed by the Cincinnati Southern Railroad; the Chattanooga Southern Railroad; the Nashville, Chattanooga and St. Louis Railway; and the Southern Railway. There are eleven free turnpikes in the county. Lookout Mountain is situated in the southern half of the county, and is famed for its splendid scenery. It is noted as a health resort as well as on account of its historic interest.

Chattanooga, the county seat, is located at the foot of Lookout Mountain, on the Tennessee River, and is the largest city situated immediately on its course. It is the gateway between the Middle and Eastern States and the Southern States. Its river and railroad connections fur-

nish first-class transportation facilities. There are 10 railroads entering the city. It has 21 miles of paved streets, 37 miles of sewers, a steel bridge over the Tennessee River, and numerous handsome buildings. It has electric light plants; telegraphic and telephonic connections with all points; and 116 miles of electric and steam railway lines, reaching all points in the city and suburbs—fare, 5 cents. It has 118 churches in the city and suburbs, with many fine church buildings, representing all denominations. It is well supplied with a pumping and reservoir system, with filters, costing over \$1,000,000. It has one of the best public school systems in the South, besides three colleges and many private schools. It is one of the healthiest cities in the United States. The annual death rate among the whites averages 10 to 1,000. The many manufacturing and agricultural interests surrounding Chattanooga make it a great commercial point. The elevation of the city is 700 feet; the elevation of the mountain, 2,000 feet. Hotel accommodations are excellent, banking facilities are ample, and the newspapers are imbued with the enterprising spirit of the city. The points of historic interest which may be mentioned are the National Cemetery, Orchard Knob, Missionary Ridge, Lookout Mountain, and the great National Military Park at Chickamauga. The manufacturing interests of the city are very much diversified, including iron, steel, wood, textiles, leather, marble, slate, clay, oil, furniture, flour, glass, drugs, medicines, groceries, etc. There are 332 manufacturing plants in operation in the city. It is estimated that since the census of 1900 was taken there has been an increase of 3,000 in the population, giving the city and suburbs a total population of 50,000. The wholesale trade amounts annually to about \$20,000,000.

The average assessed value of land in 1900 was \$14.41 per acre.

Number of manufacturing establishments in the county, 392; capital employed, \$8,793,053; amount of wages paid

during the year, \$2,076,521; number of farms, 1,665; number of acres, 138,182; number of acres improved, 67,794; value of buildings, \$558,680; value of farming implements and machinery, \$131,880; value of live stock, \$408,449; value of products not fed to live stock, \$696,166; amount paid for farm labor during the year, \$81,460; total value of land and improvements, except buildings, \$2,231,480.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn.....	448,840	Grains cut green for hay..	1,455
Wheat.....	26,700	Other forage crops.....	1,686
Oats.....	22,850	Sorghum cane sold.....	12
Other cereals.....	1,020	Sorghum sirup (gallons)..	9,179
Potatoes.....	18,503	Cotton (bales).....	12
Sweet Potatoes.....	23,305	Tobacco (pounds).....	5,590
Onions.....	1,754	Broom corn (pounds)....	1,250
Beans.....	420	Grapes (pounds).....	58,343
Peas.....	6,129	Wine (gallons).....	300
Value of other vegetables..	\$55,824	Cider (barrels).....	3
Peanuts.....	225	Vinegar (barrels).	1
Apples.....	19,366		
Cherries.....	7		
Peaches.....	150		
Pears.....	37		
Plums and prunes.....	117		
	TONS.		
Wild grasses.....	583		
Millet.....	3,319		
Clover.....	305		
Other cultivated grasses..	1,168		

NUMBER OF FRUIT TREES.

Apple.....	139,655
Cherry.....	6,296
Peach.....	117,615
Pear.....	8,350
Plum and prune.....	7,230
Grapevines.....	23,122
Value of forest products..	\$25,632
Value of small fruits.....	91,935

POULTRY AND BEES.

Value of poultry on hand.....	\$ 15,738 00
Value of poultry raised in 1899.	25,467 00
Dozens of eggs produced in 1899	226,270
Value of bees on hand.....	5,083 00
Pounds of honey produced in 1899.	21,620
Pounds of wax produced in 1899.....	380

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 38,151 00
Animals slaughtered.....	50,266 00
Total.....	\$ 88,417 00

LIVE STOCK ON HAND.

Cattle.....	8,946	Horses.....	4,157
Sheep.....	2,269	Mules.....	2,189
Hogs.....	14,766	Asses and burros.....	32

HANCOCK COUNTY.

Population in 1900, 11,147; population in 1890, 10,342. This county borders on Virginia, and has an area of 260 square miles. It is intersected by the Clinch River. Its surface is partly mountainous and covered with a fine growth of timber. It is rich in all kinds of minerals, including iron ore, lead ore, zinc, marble, granite, ocher, phosphates, coal oil, coal, and some silver. It has fine granite and marble building stone and splendid timber lands. The climate is genial and of even temperature; the water is pure and abundant; the valleys are very fertile. There are some unimproved timber and mineral lands; average price, about \$10 per acre. The best improved bottom lands are worth about \$75 per acre. Corn, wheat, oats, fruit, and pork are its staple products. The county has fine water power and a projected line of railway.

The average assessed value of land in 1900 was \$4.76 per acre.

Sneedville, the county seat, is situated on the Clinch River, 50 miles northeast of Knoxville.

Number of manufacturing establishments in the county, 28; capital employed, \$24,623; amount of wages paid during the year, \$1,798; number of farms, 1,623; number of acres, 124,519; number of acres improved, 65,133; value of buildings, \$285,560; value of farming implements and machinery, \$50,770; value of live stock, \$324,485; value of products not fed to live stock, \$470,001; amount paid for farm labor during the year, \$15,410; total value of land and improvements, except buildings, \$1,051,130.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	367,150	Grains cut green for hay..	131
Wheat	29,710	Other forage crops.....	892
Oats.....	26,630	Sorghum cane sold.....	92
Other cereals.....	70	Sorghum sirup (gallons)..	11,837
Potatoes	13,221	Cotton (bales).....	1
Sweet potatoes.....	9,390	Tobacco (pounds).....	34,460
Onions.....	1,313	Broom corn (pounds)....	580
Beans.....	687	Dried fruit (pounds)....	116,790
Peas	70	Grapes (pounds).....	2,385
Value of other vegetables..	\$12,736	Wine (gallons).....	4
Grass seed.....	59	Cider (barrels).....	38
Peanuts.....	18	Vinegar (barrels).....	38
Apples	83,256		
Cherries.....	123		
Peaches.....	312		
Pears.....	99		
Plums and prunes.....	50		
	TONS.		
Wild grasses.....	4		
Millet	377		
Clover.....	440		
Other cultivated grasses..	1,591		

NUMBER OF FRUIT TREES.

Apple	58,622
Cherry	513
Peach.....	2,850
Pear	243
Plum and prune.....	771
Grapevines	192
Value of forest products..	\$41,631
Value of small fruits....	509

POULTRY AND BEES.

Value of poultry on hand.....	\$ 13,871 00
Value of poultry raised in 1899.	33,050 00
Dozens of eggs produced in 1899.....	151,440
Value of bees on hand.....	6,319 00
Pounds of honey produced in 1899.....	25,680
Pounds of wax produced in 1899.....	740

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 92,908 00
Animals slaughtered..	59,854 00
Total	\$152,762 00

LIVE STOCK ON HAND.

Cattle	6,084	Horses	1,933
Sheep.....	4,520	Mules.....	1,038
Hogs.....	12,817	Asses and burros.....	38

HAWKINS COUNTY.

Population in 1900, 24,267; population in 1890, 22,246. This county is in the Eastern Division of the State, bordering on Virginia, and has an area of about 490 square miles. It is intersected by the Tennessee River, and is bounded on the northwest by Clinch Mountain. Its surface is hilly; its valleys are fertile; while the county is well covered with a fine growth of timber, including the numerous kinds of hardwoods and soft woods common to the South. Among the minerals of the county are iron, zinc, lead, barytes, magnesia, iron pyrites, salt, marble, and oil. Its staple products are corn, wheat, oats, grass, cattle, hogs, and sheep; while perhaps no county in the State of its population ships more chickens, eggs, butter, etc., than does Hawkins. The Southern Railway passes through the southern portion of the county. A franchise has been secured for an electric railway over the public roads of the county, and a movement is on foot to build an electric line of railway through from Knoxville to Bristol, which road, when completed, will run directly through the center of the county from one end to the other. It is finely watered by numerous large creeks, thus affording cheap power for all manufacturing purposes; while the many mineral springs—including sulphur, chalybeate, lithia, alum, etc.—place it far ahead of any section in the entire South as a health and pleasure resort.

Rogersville, the county seat, is situated on the Southern Railway, and is among the best business towns of its size in the State. It is near the Tennessee River. Its streets are well paved, and it has a fine electric light plant, five churches, three prosperous schools, two banks, and three newspapers. One mile from the depot is a quarry, from which is mined a beautiful variegated marble, which for decorative and interior use is pronounced the most desirable found in the United States. A fine mineral well is located in the center of the Public Square, affording pure,

health-giving water to all visitors. Its population in 1900 was 1,386.

The average assessed value of land for 1900 was \$6.47 per acre.

Number of manufacturing establishments in the county, 81; capital employed, \$89,209; amount of wages paid during the year, \$19,174; number of farms, 3,263; number of acres, 281,924; number of acres improved, 150,298; value of buildings, \$876,530; value of farming implements and machinery, \$149,390; value of live stock, \$773,068; value of products not fed to live stock, \$1,094,155; amount paid for farm labor during the year, \$68,620; total value of land and improvements, except buildings, \$2,589,680.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	796,080	Other cultivated grasses..	9,470
Wheat.....	137,650	Grains cut green for hay .	1,237
Oats	57,080	Other forage crops.....	3,790
Other cereals.....	595	Sorghum cane sold	52
Potatoes.....	26,968	Sorghum sirup (gallons)..	35,830
Sweet potatoes.....	26,490	Cotton (bales)	1
Onions.....	2,299	Tobacco (pounds).....	60,050
Beans	737	Broom corn (pounds).....	1,220
Peas	894	Dried fruit (pounds).....	46,900
Value of other vegetables..	\$41,680	Grapes (pounds).....	26,040
Clover seed.....	340	Wine (gallons).....	122
Other grass seed.....	972	Cider (barrels).....	265
Peanuts	28	Vinegar (barrels)	220
Apples	162,210	NUMBER OF FRUIT TREES.	
Cherries.....	122	Apple	126,384
Peaches	430	Cherry	1,699
Pears	685	Peach	13,973
Plums and prunes	192	Pear	1,416
	TONS.	Plum and prune	1,246
Wild grasses.	1	Grapevines	1,603
Millet.....	1,364	Value of forest products..	\$73,559
Clover.....	2,661	Value of small fruits.....	1,356

POULTRY AND BEES.

Value of poultry on hand.....	\$ 36,349 00
Value of poultry raised in 1899.....	81,234 00
Dozens of eggs produced in 1899.....	458,910
Value of bees on hand.....	11,870 00
Pounds of honey produced in 1899	54,190
Pounds of wax produced in 1899....	1,320

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$214,567 00
Animals slaughtered	111,292 00
Total.....	\$325,859 00

LIVE STOCK ON HAND.

Cattle	16,131	Horses	5,409
Sheep.....	8,580	Mules.....	1,792
Hogs.....	22,875	Asses and burros.....	62

JAMES COUNTY.

Population in 1900, 5,407; population in 1890, 4,903. This county has an area of 210 square miles, and is bounded on the west by the Tennessee River. Its surface is rolling, and the soil is partly fertile. The county is traversed by the Southern Railway. The value of improved lands is about \$20 per acre. There is a large acreage of unimproved lands, the average price being about \$5 per acre.

Ooltewah, the county seat, is located on the Southern Railway. It has churches and schools, two fine flouring mills, one bank, and a pottery manufacturing plant.

There are valuable iron ores found in the county, mostly undeveloped. Cheap lands, a healthful climate, and a low tax rate offer inducements to home seekers. The average assessed value of lands in 1900 was \$5.42 per acre.

Number of manufacturing establishments in the county, 20; capital employed, \$123,462; amount of wages paid during the year, \$16,222; number of farms, 719; number of acres, 85,517; number of acres improved, 38,236; value of buildings, \$154,890; value of farming implements and machinery, \$44,590; value of live stock, \$172,219; value of products not fed to live stock, \$275,402; amount paid for farm labor during the year, \$16,320; total value of land and improvements, except buildings, \$729,990.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	273,510	Grains cut green for hay..	359
Wheat.....	29,550	Other forage crops	204
Oats.....	5,860	Sorghum cane sold	79
Other cereals	80		
Potatoes	2,664	Sorghum sirup (gallons)..	4,773
Sweet potatoes.	11,193	Cotton (bales)	37
Onions	844	Tobacco (pounds).....	7,410
Beans	50	Broom corn (pounds)....	340
Peas.....	730	Dried fruit (pounds)....	360
Value of other vegetables..	\$12,199	Grapes (pounds).....	21,600
Clover seed.....	93	Wine (gallons)	57
Peanuts	13	Cider (barrels).	6
Apples	6,792	Vinegar	4
Cherries.....	3		
Peaches	300	NUMBER OF FRUIT TREES.	
Pears.....	110	Apple.....	37,154
Plums and prunes	78	Cherry	1,043
		Peach	16,939
		Pear	1,110
		Plum and prune.....	3,607
		Grapevines	2,395
		Value of forest products..	\$18,971
		Value of small fruits....	2,290

POULTRY AND BEES.

Value of poultry on hand.....	\$	7,225	00
Value of poultry raised in 1899.....		13,400	00
Dozens of eggs produced in 1899.....		144,440	
Value of bees on hand.....		2,011	00
Pounds of honey produced in 1899.....		7,020	00
Pounds of wax produced in 1899.....		110	

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$34,310 00
Animals slaughtered	28,823 00
	<hr/>
Total.....	\$63,133 00

LIVE STOCK ON HAND.

Cattle	3,131	Horses	866
Sheep	1,802	Mules	946
Hogs	7,061	Asses and burros	14

JEFFERSON COUNTY.

Population in 1900, 18,590; population in 1890, 16,478. This county has an area of 310 square miles, and is bounded on the northwest by the Holston River and intersected by the French Broad River. Its surface is marked by high ridges and fertile valleys. It has a fine timber growth of oak, hickory, maple, poplar, ash, gum, and sycamore. Iron ore and limestone are found in paying quantities. Wheat, corn, oats, grasses, fruit, and pork are the staple products. The Southern Railway intersects the county.

Dandridge, the county seat, lies three miles north of the French Broad River. It is a flourishing town, with a weekly newspaper, a bank, good churches, and flourishing commercial and manufacturing establishments.

Mossy Creek and Jefferson City are flourishing towns in the county, with weekly newspapers, schools, churches, commercial establishments, and manufacturing enterprises.

The average assessed value of lands in 1900 was \$10.21 per acre.

Number of manufacturing establishments in the county, 90; capital employed, \$229,905; amount of wages paid during the year, \$27,170; number of farms, 2,162; number of acres, 188,557; number of acres improved, 125,618; value of buildings, \$800,080; value of farming implements and machinery, \$173,510; value of live stock, \$596,325; value of products not fed to live stock, \$1,014,949; amount paid for farm labor during the year, \$64,040; total value of land and improvements, except buildings, \$2,681,490.

AGRICULTURAL PRODUCTS FOR 1899.

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POULTRY AND BEES.

Value of poultry on hand.....	\$ 25,336 00
Value of poultry raised in 1899.....	56,904 00
Dozens of eggs produced in 1899.....	411,580
Value of bees on hand.....	4,244 00
Pounds of honey produced in 1899.....	18,750
Pounds of wax produced in 1899.....	560

VALUE OF ANIMAL PRODUCTS FOR 1899

Live animals sold.....	\$187,973 00
Animals slaughtered.....	88,676 00
Total.....	<u>\$276,649 00</u>

LIVE STOCK ON HAND.

Cattle.....	10,697	Horses.....	4,408
Sheep.....	2,736	Mules.....	1,567
Hogs.....	21,711	Asses and burros.....	89

JOHNSON COUNTY.

Population in 1900, 10,589; population in 1890, 8,858. This county has an area of 340 square miles, and borders on Virginia and North Carolina. The Watauga River drains a part of the county. The surface of the county is mountainous, with fertile valleys. The grazing is fine for sheep and cattle. It has a timber growth of chestnut, ash, oak, and other varieties. The soil in its valleys produces corn, wheat, oats, grasses, etc. Iron ore is found in the county.

Mountain City is the county seat. It has a weekly newspaper, schools, churches, and commercial establishments.

The average assessed value of lands in 1900 was \$3.65 per acre.

Number of manufacturing establishments in the county, 42; capital employed, \$45,742; amount of wages paid during the year, \$5,345; number of farms, 1,429; number of acres, 122,570; number of acres improved, 55,992; value of buildings, \$404,380; value of farming implements and machinery, \$60,680; value of live stock, 302,537; value of products not fed to live stock, \$418,081; amount paid for farm labor during the year, \$24,930; total value of land and improvements, except buildings, \$1,392,290.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	224,190	Other forage crops.....	1,788
Wheat.....	34,500	Sorghum cane sold.....	12
Oats.....	59,900		
Other cereals	5,450	Sorghum sirup (gallons) ..	24,966
Potatoes.....	20,662	Tobacco (pounds).....	10,860
Sweet potatoes.....	5,650	Broom corn (pounds).....	730
Onions.....	1,397	Dried fruit (pounds).....	255,730
Beans	2,408	Grapes (pounds).....	27,678
Peas	224	Wine (gallons)	181
Value of other vegetables..	\$14,230	Cider (barrels)	80
Peanuts	15	Vinegar (barrels).....	56
Apples	210,800		
Cherries.....	104	NUMBER OF FRUIT TREES.	
Peaches	333	Apple.....	64,848
Pears.	87	Cherry	593
Plums and prunes.....	51	Peach	5,911
		Pear.....	273
	TONS.	Plum and prune.....	228
Millet.....	36	Grapevines	1,962
Clover	185		
Other cultivated grasses..	4,214	Value of forest products..	\$22,036
Grains cut green for hay..	10	Value of small fruits.....	523

POULTRY AND BEES.

Value of poultry on hand.....	\$ 9,006 00
Value of poultry raised in 1899.....	21,454 00
Dozens of eggs produced in 1899.....	97,690
Value of bees on hand.	4,727 00
Pounds of honey produced in 1899	22,110

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 72,268 00
Animals slaughtered	51,446 00
Total	\$123,714 00

LIVE STOCK ON HAND.

Cattle	7,216	Horses	1,529
Sheep	8,087	Mules	592
Hogs.....	7,117	Asses and burros.....	11

KNOX COUNTY.

Population in 1900, 74,302; population in 1890, 59,557. This county has an area of about 612 square miles. The Clinch River forms the western boundary of the county, and there are many rich farms in the valley along this stream. The Holston and French Broad Rivers form a junction four miles east of Knoxville, making the Tennessee River. The farms are very rich and productive along the banks of these streams, and the other valleys worthy of special mention are Grassy and Beaver. Improved valley lands range in price between \$20 and \$100 per acre. The county owns about 200 miles of fine macadamized turnpikes, which reach every important section of the county. The lands in the immediate vicinity of Knoxville are well adapted to truck farming. All kinds of vegetables and fruits adapted to the climate are profitably grown around Knoxville, which furnishes a ready market. There is an abundance of grasses, the hay products being the most valuable. Excellent schools and churches of the various denominations are distributed throughout the county. An invigorating climate, good society, and good lands are inducements offered to home seekers.

Knoxville, the county seat, is beautifully situated on the bank of the Tennessee River. The city has 120 miles of good streets; 27 miles of sewers; an abundance of good water; an electric light plant; a gas plant; 27 miles of electric car lines; one steam motor line, starting near the center of the city and reaching a suburb, Fountain City, 5 miles distant. The following are the railroads entering the city: Southern Railway; Knoxville and Ohio Railroad; Knoxville, Cumberland Gap and Louisville Railroad; Atlanta, Knoxville and Northern Railroad; and Knoxville and Augusta Railroad; and, with their various branches, they reach all important points, furnishing ample shipping facilities to the leading markets. The wholesale trade of the city is very extensive, and its manufacturing

interests are steadily growing. The Federal courts and the State Supreme Court for East Tennessee are held at Knoxville. The government buildings are among the finest in the State. On account of the number of churches and schools, Knoxville is known as a religious and educational center. The University of Tennessee, the State School for the Deaf and Dumb, and the Insane Asylum for the Eastern Division of the State are located here. The public schools are equal to any in the State, and there are numerous private institutions of learning located in this city. The shops of the Southern Railway are located at this point. Knoxville has many fine residences and all the conveniences of an up-to-date city. The magnificent scenery around it makes it one of the most attractive places of residence in the State.

The average assessed value of land in 1900 was \$16.66.

Number of manufacturing establishments in the county, 336; capital employed, \$61,182,808; amount of wages paid during the year, \$1,686,822; number of farms, 3,862; number of acres, 290,955; number of acres improved, 188,771; value of buildings, \$1,739,620; value of farming implements and machinery, \$354,410; value of live stock, \$957,296; value of products not fed to live stock, \$1,776,044; amount paid for farm labor during the year, \$188,710; total value of land and improvements, except buildings, \$5,644,870.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	906,680	Grains cut green for hay..	4,270
Wheat ..	188,500	Other forage crops	8,347
Oats	77,450	Sorghum cane sold.....	9
Other cereals	2,670		
Potatoes.....	43,609	Sorghum sirup (gallons)..	32,415
Sweet potatoes.....	68,165	Cotton (bales).....	1
Onions.....	13,662	Tobacco (pounds).....	18,000
Beans	753	Broom corn (pounds).....	3,070
Peas.....	4,098	Dried fruit (pounds).....	14,960
Value of other vegetables	\$142,236	Grapes (pounds).....	560,495
Clover seed.....	201	Wine (gallons).	2,351
Other grass seed.....	337	Cider (barrels).	517
Peanuts	389	Vinegar (barrels).....	389
Apples	140,088		
Cherries.....	538		
Peaches	1,623		
Pears.....	1,890		
Plums and prunes	2,611		
	TONS.		
Wild grasses.....	476		
Millet.	8,250		
Clover.....	2,376		
Other cultivated grasses..	10,130		

NUMBER OF FRUIT TREES.

Apple ..	340,992
Cherry ..	18,285
Peach ..	119,986
Pear.....	19,334
Plum and prune.	18,697
Grapevines	99,528
Value of forest products..	\$61,745
Value of small fruits....	32,557

POULTRY AND BEES.

Value of poultry on hand..	\$ 35,511 00
Value of poultry raised in 1899.....	73,215 00
Dozens of eggs produced in 1899..	587,290
Value of bees on hand.....	7,103 00
Pounds of honey produced in 1899	31,940

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$164,284 00
Animals slaughtered.....	125,155 00
Total	\$289,439 00

LIVE STOCK ON HAND.

Cattle	18,842	Horses	8,134
Sheep.....	1,902	Mules	3,361
Hogs.....	19,397	Asses and burros....	132

LOUDON COUNTY.

Population in 1900, 10,838; population in 1890, 9,273. This county has an area of 256 square miles. It is bounded on the north by the Clinch River, intersected by the Holston River, and drained by the Little Tennessee River. The surface is hilly, but the soil is fertile. There is a fine forest growth in the county, and the price of land ranges from \$5 to \$25 per acre. There are good openings in the county for marble works and furniture factories. The county is intersected by the Southern Railway.

Loudon, the county seat, is situated on the Tennessee River and the Southern Railway. It is a fine shipping point to Chattanooga by river; has splendid schools, churches, a weekly newspaper, and general stores.

The average assessed value of land for 1900 was \$9.13 per acre.

Number of manufacturing establishments in the county, 56; capital employed, \$873,936; amount of wages paid during the year, \$93,064; number of farms, 1,206; number of acres, 139,819; number of acres improved, 81,356; value of buildings, \$429,470; value of farming implements and machinery, \$111,990; value of live stock, \$346,436; value of products not fed to live stock, \$514,591; amount paid for farm labor during the year, \$43,160; total value of land and improvements, except buildings, \$1,484,560.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	407,550	Grains cut green for hay..	1,820
Wheat.....	145,260	Other forage crops.....	4,026
Oats.....	28,540	Sorghum cane sold.....	214
Other cereals	140	Sorghum sirup (gallons)..	9,141
Potatoes.....	4,835	Cotton (bales)	2
Sweet potatoes.....	9,839	Tobacco (pounds).....	11,100
Onions	485	Broom corn (pounds)	3,110
Beans	161	Dried fruit (pounds).....	2,850
Peas	4,743	Grapes (pounds).....	49,462
Value of other vegetables..	\$23,196	Wine (gallons)	681
Clover seed	41	Cider (barrels)	38
Peanuts	147	Vinegar (barrels).....	32
Apples	21,627		
Cherries.....	65	NUMBER OF FRUIT TREES.	
Peaches.....	86	Apple.....	32,621
Pears.....	78	Cherry.....	969
Plums and prunes.....	92	Peach.....	11,081
		Pear.....	793
	TONS.	Plum and prune.....	749
Wild grasses.....	116	Grapevines.....	6,829
Millet.....	810	Value of forest products..	\$31,475
Clover.....	768	Value of small fruits	1,291
Other cultivated grasses..	2,116		

POULTRY AND BEES.

Value of poultry on hand	\$ 11,645 00
Value of poultry raised in 1899.....	24,450 00
Dozens of eggs produced in 1899.....	171,990
Value of bees on hand.....	3,752 00
Pounds of honey produced in 1899.....	14,880

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 76,270 00
Animals slaughtered.....	48,540 00
Total.....	\$124,810 00

LIVE STOCK ON HAND.

Cattle	6,370	Horses	2,232
Sheep.....	2,150	Mules	1,345
Hogs.....	11,999	Asses and burros.....	37

M'MINN COUNTY.

Population in 1900, 19,163; population in 1890, 17,890. This is an Eastern Division county, with an area of 452 square miles, and is bounded on the northwest by the Hiwassee River. Its surface is well covered with forests. The soil is very fertile in the valleys. The Southern Railway intersects the county. Corn, wheat, oats, grasses, and pork are the staple products.

Athens, the county seat, is situated on the Southern Railway, about 55 miles southwest of Knoxville. It has a fine electric light plant, churches, good schools, the U. S. Grant University, and storehouses. Its population in 1900 was 1,849.

The average assessed value of land in 1900 was \$5.34 per acre.

Number of manufacturing establishments in the county, 81; capital employed, \$366,702; amount of wages paid during the year, \$53,086; number of farms, 2,542; number of acres, 268,704; number of acres improved, 149,149; value of buildings, \$661,290; value of farming implements and machinery, \$188,640; value of live stock, \$622,849; value of products not fed to live stock, \$982,532; amount paid for farm labor during the year, \$43,390; total value of land and improvements, except buildings, \$1,995,310.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	784,040	Grains cut green for hay..	2,582
Wheat.....	143,760	Other forage crops.....	3,736
Oats.....	27,770	Sorghum cane sold	29
Other cereals.	185		
Potatoes.....	9,904	Sorghum sirup (gallons)..	26,802
Sweet potatoes.....	19,182	Cotton (bales).....	391
Onions.....	1,035	Tobacco (pounds).....	15,160
Beans.....	832	Broom corn (pounds)...	1,540
Peas.....	37,512	Dried fruit (pounds).....	2,540
Value of other vegetables..	\$34,437	Grapes (pounds).....	94,900
Clover seed	198	Wine (gallons).....	73
Other grass seed.....	401	Cider (barrels).....	56
Peanuts	310	Vinegar (barrels).....	40
Apples.....	113,723		
Cherries.....	138		
Peaches.....	3,477		
Pears.....	368		
Plums and prunes.....	961		
	TONS.		
Wild grasses.....	1,047		
Millet.....	2,152		
Clover.....	739		
Other cultivated grasses..	4,247		

NUMBER OF FRUIT TREES.

Apple.....	79,585
Cherry.....	2,718
Peach.....	38,947
Pear.....	2,175
Plum and prune.....	4,646
Grapevines.....	11,092
Value of forest products..	\$49,614
Value of small fruits....	1,351

POULTRY AND BEES.

Value of poultry on hand. .	\$ 24,518 00
Value of poultry raised in 1899	16,667 00
Dozens of eggs produced in 1899	365,900
Value of bees on hand....	6,597 00
Pounds of honey produced in 1899.....	42,030

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$121,737 00
Animals slaughtered.....	82,632 00
Total.....	\$204,369 00

LIVE STOCK ON HAND.

Cattle.....	11,718	Horses	3,755
Sheep.....	4,512	Mules	2,599
Hogs.....	20,840	Asses and burros....	51

MARION COUNTY.

Population in 1900, 17,281; population in 1890, 15,411. This county is bounded on the east by Hamilton County, and borders on Alabama and Georgia. It has an area of 500 square miles. It is intersected by the Sequatchie River, and is touched by the Tennessee River on the southeast corner. The surface is broken by high ridges running parallel with Cumberland Mountain. The soil is fertile, with fine forests in many localities. The staple products are corn, cotton, oats, wheat, hay, and pork. Several mines of bituminous coal are found in the county. South Pittsburg, Jasper, and Whitwell are three flourishing towns. South Pittsburg is situated on the Sequatchie River and the Nashville, Chattanooga and St. Louis Railway.

Jasper, the county seat, is situated on the Sequatchie River and the Nashville, Chattanooga and St. Louis Railway, and has several churches, schools, and stores.

Coal is mined near each of the three above-mentioned towns. There is a considerable amount of improved and unimproved land throughout the county, which can be purchased at a reasonable price. The inducements to home seekers are very inviting. The average assessed value of land for 1900 was \$4.15 per acre.

Number of manufacturing establishments in the county, 53; capital employed, \$1,884,347; amount of wages paid during the year, \$236,066; number of farms, 1,186; number of acres, 123,181; number of acres improved, 50,154; value of buildings, \$350,260; value of farming implements and machinery, \$84,790; value of live stock, \$352,228; value of products not fed to live stock, \$461,085; amount paid for farm labor during the year, \$22,110; total value of land and improvements, except buildings, \$1,238,750.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	451,050	Grains cut green for hay ..	2,719
Wheat.	13,800	Other forage crops.....	818
Oats.	8,930	Sorghum cane sold	31
Other cereals.....	210	Sorghum sirup (gallons) ..	10,248
Potatoes.....	9,656	Tobacco (pounds).....	3,850
Sweet potatoes.....	13,612	Broom corn (pounds) ...	30
Onions.....	1,129	Dried fruit (pounds).....	3,500
Beans.....	159	Grapes (pounds).....	91,120
Peas.	1,552	Wine (gallons).....	396
Value of other vegetables..	2,294	Cider (barrels).....	16
Peanuts	81	Vinegar (barrels).....	10
Apples	11,342		
Cherries	101		
Peaches	289		
Pears.....	69		
Plums and prunes	90		
	TONS:		
Wild grasses	98		
Millet.....	337		
Clover	128		
Other cultivated grasses..	843		

NUMBER OF FRUIT TREES.

Apple.....	80,182
Cherry.....	2,999
Peach.....	31,223
Pear.....	1,345
Plum and prune.....	6,192
Grapevines	21,152
Value of forest products..	\$42,613
Value of small fruits	713

POULTRY AND BEES.

Value of poultry on hand.....	\$ 12,005 00
Value of poultry raised in 1899	18,302 00
Dozens of eggs produced in 1899.....	209,800
Value of bees on hand.....	8,946 00
Pounds of honey produced in 1899.....	13,550

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 17,040 00
Animals slaughtered	57,926 00
Total	\$104,976 00

LIVE STOCK ON HAND.

Cattle	7,033	Horses	1,875
Sheep.....	3,999	Mules	1,616
Hogs.....	18,553	Asses and burros.....	48

MEIGS COUNTY.

Population in 1900, 7,491; population in 1890, 6,330. This county has an area of about 200 square miles. It is 45 miles in length and about 6 or 8 miles in width, and is bounded on the west by the Tennessee River the entire length. The Hiwassee River crosses the southern portion. River and valley lands are very fertile, and are worth from \$20 to \$100 per acre; ridge and timber lands, from \$2 to \$10 per acre. Corn, wheat, oats, hogs, hay, cattle, sheep, horses, and mules are the principal products.

Decatur, the county seat, is located 2½ miles east of the Tennessee River.

The county is well supplied with stores, schools, and churches. The average assessed value of land in 1900 was \$5.97 per acre.

Number of manufacturing establishments in the county, 25; capital employed, \$64,338; amount of wages paid during the year, \$5,468; number of farms, 983; number of acres, 124,918; number of acres improved, 64,248; value of buildings, \$282,580; value of farming implements and machinery, \$75,060; value of live stock, \$304,499; value of products not fed to live stock, \$461,926; amount paid for farm labor during the year, \$24,680; total value of land and improvements, except buildings, \$1,212,460.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	497,250	Other cultivated grasses..	1,242
Wheat	47,660	Grains cut green for hay..	1,441
Oats	25,240	Other forage crops.....	626
Other cereals	60	Sorghum sirup (gallons)..	17,116
Potatoes.....	3,641	Cotton (bales).....	5
Sweet potatoes	7,805	Tobacco (pounds).....	15,590
Onions	971	Broom corn (pounds).....	1,950
Beans	370	Dried fruit (pounds)....	11,960
Peas	15,347	Grapes (pounds)	92,952
Clover seed.....	23	Wine (gallons)	1,018
Other grass seed.....	5	Cider (barrels).....	36
Peanuts.....	50	Vinegar (barrels)	26
Apples	51,411		
Cherries.....	21	NUMBER OF FRUIT TREES.	
Peaches	122	Apple	57,555
Pears.....	589	Cherry	677
Plums and prunes	719	Peach	22,650
		Pear.....	1,324
		Plum and prune.....	1,880
		Grapevines	11,900
		Value of forest products..	\$12 635
		Value of small fruits....	2,774
	TONS.		
Wild grasses	313		
Millet	436		
Clover.....	334		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 10,720 00
Value of poultry raised in 1899.....	21,204 00
Dozens of eggs produced in 1899	209,460
Value of bees on hand	2,599 00
Pounds of honey produced in 1899 ..	13,700

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 60,442 00
Animals slaughtered.....	45,636 00
Total	\$106 078 00

LIVE STOCK ON HAND.

Cattle.....	5,196	Horses	1,625
Sheep.....	1,835	Mules	1,340
Hogs.....	9,748	Asses and burros.....	29

MONROE COUNTY.

Population in 1900, 18,585; population in 1890, 15,329. This county has an area of 580 square miles. It is bounded on the east by North Carolina; on the north, by the Little Tennessee River. The eastern portion is mountainous and covered with valuable timbers. There are also gold, iron ore, and copper in the mountainous section; there is a considerable amount of zinc and lead through the northern portion of the county. The soil is fertile where cultivated, and the principal products are corn, wheat, potatoes, grasses, cattle, and hogs. The Southern Railway traverses the northwestern portion of the county; the Atlanta, Knoxville and Northern Railroad passes through the center; while the Tellico Railway reaches the eastern and mountainous portion of the county.

Madisonville, the county seat, is located 45 miles from Knoxville. It has good schools, a bank, and two weekly newspapers.

The county presents a very inviting field for immigrant farmers. The average price of improved land in the county is about \$10 per acre. Most of the unimproved land is in the hands of capitalists; price, from \$2 to \$4 per acre. The average assessed value of land in 1900 was \$3.75 per acre.

Number of manufacturing establishments in the county, 78; capital employed, \$309,696; amount of wages paid during the year, \$89,791; number of farms, 2,384; number of acres, 286,223; number of acres improved, 120,950; value of buildings, \$530,750; value of farming implements and machinery, \$152,640; value of live stock, \$570,571; value of products not fed to live stock, \$799,632; amount paid for farm labor during the year, \$34,540; total value of land and improvements, except buildings, \$1,912,220.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	655,820	Grains cut green for hay..	2,624
Wheat ..	146,260	Other forage crops.....	6,031
Oats	20,650	Sorghum cane sold.....	13
Other cereals	575	Sorghum sirup (gallons)..	27,112
Potatoes.....	8,868	Cotton (bales).....	78
Sweet potatoes.....	19,808	Tobacco (pounds).....	28,770
Onions.....	1,252	Broom corn (pounds)	23,510
Beans.....	1,199	Dried fruit (pounds).....	12,160
Peas.....	21,794	Grapes (pounds)	61,197
Value of other vegetables..	\$32,538	Wine (gallons).....	309
Clover seed.....	292	Cider (barrels).....	42
Other grass seed.....	400	Vinegar (barrels).....	38
Peanuts	281		
Apples	60,239		
Cherries.....	109		
Peaches.....	701		
Pears.....	113		
Plums and prunes.....	765		
	TONS.		
Wild grasses.....	327		
Millet.....	1,291		
Clover.....	995		
Other cultivated grasses..	3,355		

NUMBER OF FRUIT TREES.

Apple.....	81,853
Cherry	775
Peach.....	28,792
Pear.....	1,584
Plum and prune	3,748
Grapevines	11,036

Value of forest products..	\$59,664
Value of small fruits.....	943

POULTRY AND BEES.

Value of poultry on hand.....	\$ 19,622 00
Value of poultry raised in 1899.....	31,327 00
Dozens of eggs produced in 1899 ..	305,780
Value of bees on hand.....	8,572 00
Pounds of honey produced in 1899.....	55,190

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$102,006 00
Animals slaughtered.....	76,844 00
Total.....	\$178,850 00

LIVE STOCK ON HAND.

Cattle	12,445	Horses	3,110
Sheep.....	4,461	Mules	2,203
Hogs.....	19,537	Asses and burros.....	75

MORGAN COUNTY.

Population in 1900, 9,587; population in 1890, 7,639. This county has an area of 448 square miles. Embury and Obed's Rivers drain the county. Its surface is mostly hilly, and it is well timbered with chestnut, oak, and pine. The staple products are corn, grasses, and pork. A large deposit of bituminous coal is found here. The Southern Railway intersects the county. Improved land ranges from \$5 to \$10 per acre; unimproved land, from \$2 to \$10, according to location.

Wartburg, the county seat, is 44 miles west of Knoxville.

The average assessed value of land in 1900 was \$3.09 per acre.

Number of manufacturing establishments in the county, 38; capital employed, \$156,414; amount of wages paid during the year, \$23,256; number of farms, 1,143; number of acres, 126,113; number of acres improved, 33,092; value of buildings, \$243,060; value of farming implements and machinery, \$46,830; value of live stock, \$248,215; value of products not fed to live stock, \$286,950; amount paid for farm labor during the year, \$12,150; total value of land and improvements, except buildings, \$510,460.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	130,830	Grains cut green for hay..	728
Wheat.....	1,040	Other forage crops.....	1,016
Oats.....	10,880	Sorghum cane sold.....	327
Other cereals.....	2,306	Sorghum sirup (gallons)..	7,730
Potatoes.....	29,086	Cotton (bales).....	3
Sweet potatoes.....	18,434	Tobacco (pounds).....	10,070
Onions.....	2,731	Dried fruit (pounds).....	35,630
Beans.....	586	Grapes (pounds).....	73,923
Peas.....	1,315	Wine (gallons).....	1,209
Value of other vegetables..	\$20,610	Cider (barrels).....	101
Peanuts.....	45	Vinegar (barrels).....	32
Apples.....	64,296		
Cherries.....	106	NUMBER OF FRUIT TREES.	
Peaches.....	32	Apple.....	94,563
Pears.....	55	Cherry.....	1,490
Plums and prunes.....	570	Peach.....	9,259
		Pear.....	879
		Plum and prune.....	4,424
		Grapevines.....	9,735
		Value of forest products..	\$21,612
Wild grasses.....	TONS. 341	Value of small fruits....	1,228
Millet.....	758		
Clover.....	107		
Other cultivated grasses..	1,877		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 7,384 00
Value of poultry raised in 1899.....	13,583 00
Dozens of eggs produced in 1899.....	123,940
Value of bees on hand.....	7,474 00
Pounds of honey produced in 1899.....	37,910

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$29,725 00
Animals slaughtered.....	35,060 00
Total.....	\$64,785 00

LIVE STOCK ON HAND.

Cattle.....	5,554	Horses.....	1,172
Sheep.....	6,668	Mules.....	683
Hogs.....	11,256	Asses and burros.....	12

POLK COUNTY.

Population in 1900, 11,357; population in 1890, 8,361. This county has an area of 400 square miles. The Hiwassee and Ocoee Rivers flow through the county. The surface is mountainous and well timbered. The grazing for sheep and cattle is abundant. It has fine quarries of gray limestone and extensive copper mines; lead has also been found in the county. Corn, wheat, cattle, grass, and pork are the staple products. The Marietta and North Georgia Railroad traverses the county.

Benton, the county seat, is 40 miles northeast of Chattanooga and 3 miles south of the Hiwassee River. It has churches, schools, and a courthouse.

The average assessed value of land in 1900 was \$4.03 per acre.

Number of manufacturing establishments in the county, 43; capital employed, \$289,408; amount of wages paid during the year, \$66,405; number of farms, 1,130; number of acres, 131,051; number of acres improved, 44,022; value of buildings, \$205,450; value of farming implements and machinery, \$62,200; value of live stock, \$238,644; value of products not fed to live stock, \$369,038; amount paid for farm labor during the year, \$14,420; total value of land and improvements, except buildings, \$664,140.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	280,550	Other forage crops.....	811
Wheat.....	25,460	Sorghum cane sold.....	27
Oats	8,360	Sorghum sirup gallons...	11,270
Other cereals.....	528	Cotton (bales).....	981
Potatoes.....	4,493	Tobacco (pounds).....	6,820
Sweet potatoes	9,689	Broom corn (pounds).....	1,030
Onions.....	710	Dried fruit (pounds)	6,560
Beans	1,180	Grapes (pounds).....	11,417
Peas.....	8,234	Wine (gallons).....	97
Value of other vegetables..	\$18,154	Cider (barrels).....	60
Peanuts	62	Vinegar (barrels).....	10
Apples	22,416		
Cherries.....	17		
Peaches	102		
Pears.....	20		
Plums and prunes	200		
	TONS.		
Wild grasses.....	227		
Millet.....	83		
Clover.....	128		
Other cultivated grasses..	3,614		
Grains cut green for hay..	317		

NUMBER OF FRUIT TREES.

Apple	35,390
Cherry.....	384
Peach	13,372
Pear	362
Plum and prune.....	1,570
Grapevines	1,271
Value of forest products..	\$15,183
Value of small fruits	83

POULTRY AND BEES.

Value of poultry on hand ..	\$ 8,386 00
Value of poultry raised in 1899.....	15,133 00
Dozens of eggs produced in 1899.....	111,630
Value of bees on hand	6,265 00
Pounds of honey produced in 1899	35,210

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$32,840 00
Animals slaughtered.....	39,307 00
Total	\$72,147 00

LIVE STOCK ON HAND.

Cattle.....	5,241	Horses	1,207
Sheep	3,633	Mules	1,174
Hogs	3,572	Asses and burros.....	19

RHEA COUNTY.

Population in 1900, 14,318; population in 1890, 12,647. This county has an area of 360 square miles. It is bounded on the southeast by the Tennessee River; on the northwest, by Walden's Ridge. Its surface is partly mountainous. Cattle, corn, wheat, grass, fruit, and pork are the staple products of the soil. It has an abundance of coal and iron ore and fine forests of oak, hickory, gum, sycamore, and ash. The county is traversed by the Cincinnati Southern Railroad. Improved land ranges in price from \$20 per acre for uplands to \$50 per acre for river-bottom lands; unimproved land, from \$5 to \$10 per acre.

Dayton, the county seat, is 38 miles northeast of Chattanooga. It is an up-to-date town, with good business houses, churches, schools, banks, two weekly newspapers, and a number of manufacturing establishments. Its population in 1900 was 2,004.

The average assessed value of land in 1900 was \$5.74 per acre.

Number of manufacturing establishments in the county, 45; capital employed, \$672,703; amount of wages paid during the year, \$144,510; number of farms, 1,131; number of acres, 115,993; number of acres improved, 55,377; value of buildings, \$304,050; value of farming implements and machinery, \$77,650; value of live stock, \$283,249; value of products not fed to live stock, \$432,595; amount paid for farm labor during the year, \$36,240; total value of land and improvements, except buildings, \$1,175,530.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	435,120	Other forage crops.	851
Wheat.....	44,510	Sorghum cane sold.	17
Oats.	17,070	Sorghum sirup (gallons) ..	11,287
Other cereals	110	Cotton (bales)	1
Potatoes.....	15,746	Tobacco (pounds)	9,330
Sweet potatoes.....	11,919	Broom corn (pounds)	410
Onions.....	1,201	Dried fruit (pounds)	2,900
Beans	237	Grapes (pounds)	132,145
Peas	10,103	Wine (gallons)	38
Value of other vegetables..	\$47,752	Cider (barrels).....	30
Peanuts	339	Vinegar (barrels).....	22
Apples	28,242		
Cherries	12		
Peaches.	60		
Pears.....	18		
Plums and prunes	92		
	TONS.		
Wild grasses.....	133		
Millet.....	763		
Clover.	541		
Other cultivated grasses..	1,150		
Grains cut green for hay.	1,289		

NUMBER OF FRUIT TREES.

Apple	102,655
Cherry	1,486
Peach	82,123
Pear.	5,330
Plum and prune.....	1,847
Grapevines	17,583
Value of forest products..	\$ 9,307
Value of small fruits	45,371

POULTRY AND BEES.

Value of poultry on hand.....	\$ 11,492 00
Value of poultry raised in 1899.....	17,210 00
Dozens of eggs produced in 1899	169,210
Value of bees on hand.....	1,028 00
Pounds of honey produced in 1899	21,270

VALUE OF ANIMAL PRODUCTS FOR 1899

Live animals sold	\$41,342 00
Animals slaughtered	31,590 00
Total	\$75,932 00

LIVE STOCK ON HAND.

Cattle	5,417	Horses	1,730
Sheep.....	2,781	Mules.....	1,233
Hogs	11,392	Asses and burros.....	40

ROANE COUNTY.

Population in 1900, 22,738; population in 1890, 17,418. This county has an area of 450 square miles, and is intersected by the Clinch and Holston Rivers. Its surface is hilly or mountainous, and is covered with fine forests of oak, hickory, pine, and other timber. The county comprises part of Cumberland Mountain. The soil is very fertile in the valleys and river bottoms. The mineral resources of the county are coal, iron ore, and fine building stone. The staple products are corn, wheat, grass, cattle, and hogs. It has fine grazing lands, and is traversed by the Southern Railway. The price of improved land ranges from \$10 to \$15 per acre for uplands to \$100 per acre for river-bottom lands. There is a large amount of unimproved land for sale, ranging in price from \$5 to \$10 per acre. There are splendid opportunities for investment of capital in the manufacture of hardwood, and in foundries. The spirit of advancement is abroad in the county. The county has 40 miles of completed turnpikes and about 25 miles under construction. The prices for homes are reasonable, health is good, and there is a plentiful supply of good water and good timber. The schools of the county are excellent. There are a university and several high schools, and the various denominations are well represented in churches.

Kingston, the county seat, is situated at the junction of the Tennessee and Clinch Rivers, with a population of 800. It has splendid manufacturing establishments, and is noted as a health resort. It has good schools and churches, hospitable people, and enterprising merchants. It is 120 miles by water from Chattanooga, with steamboat navigation.

The average assessed value of land in 1900 was \$7.58 per acre.

Number of manufacturing establishments in the county, 110; capital employed, \$1,449,838; amount of wages paid

during the year, \$179,363; number of farms, 1,883; number of acres, 198,034; number of acres improved, 95,005; value of buildings, \$495,080; value of farming implements and machinery, \$111,500; value of live stock, \$447,394; value of products not fed to live stock, \$678,831; amount paid for farm labor during the year, \$36,980; total value of land and improvements, except buildings, \$1,641,590.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn.....	626,490	Grains cut green for hay..	1,812
Wheat.....	62,090	Other forage crops.....	1,219
Oats.....	48,920	Sorghum cane sold.....	46
Other cereals.....	1,199	Sorghum sirup (gallons)..	22,258
Potatoes.....	14,249	Cotton (bales).....	3
Sweet potatoes.....	14,033	Tobacco (pounds).....	14,430
Onions.....	1,193	Broom corn (pounds)....	5,970
Beans.....	391	Dried fruit (pounds).....	9,910
Peas.....	4,854	Grapes (pounds).....	53,367
Value of other vegetables..	\$31,541	Wine gallons.....	171
Clover seed.....	21	Cider (barrels).....	62
Peanuts.....	84	Vinegar (barrels).....	38
Apples.....	59,610		
Cherries.....	72		
Peaches.....	946		
Pears.....	709		
Plums and prunes.....	1,081		
	TONS.		
Wild grasses.....	433		
Millet.....	1,521		
Clover.....	438		
Other cultivated grasses	4,744		

NUMBER OF FRUIT TREES.

Apple.....	80,455
Cherry.....	1,350
Peach.....	19,432
Pear.....	2,721
Plum and prune.....	3,909
Grapevines.....	8,439

Value of forest products.. \$30,185
Value of small fruits..... 4,563

POULTRY AND BEES.

Value of poultry on hand.....	\$ 14,907 00
Value of poultry raised in 1899.....	25,840 00
Dozens of eggs produced in 1899.....	215,590
Value of bees on hand.....	5,095 00
Pounds of honey produced in 1899.....	28,270

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 73,001 00
Animals slaughtered.....	73,004 00
Total.....	\$146,908 00

LIVE STOCK ON HAND.

Cattle.....	9,448	Horses.....	2,867
Sheep.....	2,193	Mules.....	2,248
Hogs.....	14,185	Asses and burros.....	35

SCOTT COUNTY.

Population in 1900, 11,077; population in 1890, 9,794. This county has an area of 620 square miles. It borders on Kentucky, and is intersected by the Cumberland River. Its surface is hilly and covered with fine forests. The staple products are corn, grass, and pork. The average price of improved land is from \$15 to \$20 per acre. There is much unimproved land for sale in the county at about \$6 per acre. Timber and coal interests furnish opportunities for profitable investment of capital. The county also has a fine fire clay. The county is healthy, and is noted for its pure air and pure water, hospitable people, and good schools and churches.

Huntsville, the county seat, is about 44 miles southwest of Knoxville. It has schools, churches, and up-to-date merchants.

The average assessed value of land in 1900 was \$2.39 per acre.

Number of manufacturing establishments in the county, 42; capital employed, \$428,469; amount of wages paid during the year, \$64,577; number of farms, 1,389; number of acres, 164,743; number of acres improved, 39,728; value of buildings, \$210,880; value of farming implements and machinery, \$42,520; value of live stock, \$273,694; value of products not fed to live stock, \$352,410; amount paid for farm labor during the year, \$11,920; total value of land and improvements, except buildings, \$545,220.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn.....	202,780	Other forage crops.....	1,512
Wheat.....	560	Sorghum cane sold.....	16
Oats.....	17,730		
Other cereals.....	1,355	Sorghum sirup (gallons)...	7,611
Potatoes.....	21,976	Cotton (bales).....	1
Sweet potatoes.....	15,453	Tobacco (pounds).....	5,980
Onions.....	2,951	Broom corn (pounds).....	70
Beans.....	2,610	Dried fruit (pounds).....	24,540
Peas.....	382	Grapes (pounds).....	14,238
Value of other vegetables.....	\$19,274	Wine (gallons).....	44
Peanuts.....	23	Cider (barrels).....	24
Apples.....	109,534	Vinegar (barrels).....	23
Cherries.....	118		
Peaches.....	297		
Pears.....	101		
Plums and prunes.....	540		
	TONS.		
Wild grasses.....	155		
Millet.....	906		
Clover.....	154		
Other cultivated grasses.....	1,034		
Grains cut green for hay.....	151		

NUMBER OF FRUIT TREES.

Apple.....	98,499
Cherry.....	848
Peach.....	5,152
Pear.....	492
Plum and prune.....	2,174
Grapevines.....	1,882

Value of forest products.....	\$56,691
Value of small fruits.....	1,141

POULTRY AND BEES.

Value of poultry on hand.....	\$ 10,406 00
Value of poultry raised in 1899.....	19,887 00
Dozens of eggs produced in 1899.....	142,080
Value of bees on hand.....	7,016 00
Pounds of honey produced in 1899.....	47,840

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$29,626 00
Animals slaughtered.....	35,552 00
Total.....	\$65,178 00

LIVE STOCK ON HAND.

Cattle.....	5,523	Horses.....	1,395
Sheep.....	6,389	Mules.....	704
Hogs.....	15,002	Asses and burros.....	23

SEQUATCHIE COUNTY.

Population in 1900, 3,326; population in 1890, 3,027. This county has an area of 250 square miles, and is intersected by the Sequatchie Valley and the Sequatchie River. The soil in the valleys is fertile. This is one of the best grape-producing counties in the South. A fine growth of beech, oak, hickory, and maple timber is found in many localities. Limestone, iron ore, and coal abound in this county. The staple products are corn, wheat, oats, grass, cattle, and pork. There are splendid grazing lands for cattle. The county is traversed by the Nashville, Chattanooga and St. Louis Railway.

Dunlap, the county seat, is situated on the Sequatchie River, 40 miles northwest of Chattanooga.

The average assessed value of land in 1900 was \$2.07 per acre.

Number of manufacturing establishments in the county, 15; capital employed, \$34,908; amount of wages paid during the year, \$6,023; number of farms, 383; number of acres, 57,034; number of acres improved, 19,850; value of buildings, \$99,550; value of farming implements and machinery, \$31,480; value of live stock, \$137,113; value of products not fed to live stock, \$167,191; amount paid for farm labor during the year, \$7,470; total value of land and improvements, except buildings, \$425,290.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn.....	126,720	Grains cut green for hay..	800
Wheat.....	19,630	Other forage crops.....	424
Oats.....	1,560	Sorghum cane sold.....	11
Other cereals.....	40		
Potatoes.....	7,094	Sorghum sirup (gallons)...	3,882
Sweet potatoes.....	4,957	Cotton (bales).....	1
Onions.....	72	Tobacco (pounds).....	2,950
Beans.....	127	Broom corn (pounds).....	560
Peas.....	1,084	Dried fruit (pounds).....	60
Value of other vegetables, \$	6,195	Grapes (pounds).....	16,495
Apples.....	12,854		
Cherries.....	28	NUMBER OF FRUIT TREES.	
Peaches.....	39	Apple.....	50,891
Pears.....	27	Cherry.....	1,268
Plums and prunes.....	193	Peach.....	8,255
		Pear.....	848
	TONS.	Plum and prune.....	2,485
Wild grasses.....	49	Grapevines.....	1,446
Millet.....	178		
Clover.....	13	Value of forest products..	\$11,744
Other cultivated grasses.....	234	Value of small fruits.....	73

POULTRY AND BEES.

Value of poultry on hand.....	\$ 5,257 00
Value of poultry raised in 1899.....	10,485 00
Dozens of eggs produced in 1899.....	83,100
Value of bees on hand.....	3,602 00
Pounds of honey produced in 1899.....	15,870

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$25,389 00
Animals slaughtered.....	19,613 00
Total.....	\$45,002 00

LIVE STOCK ON HAND.

Cattle.....	2,397	Horses.....	602
Sheep.....	2,016	Mules.....	150
Hogs.....	6,257	Asses and burros.....	7

SEVIER COUNTY.

Population in 1900, 22,021; population in 1890, 18,761. This county has an area of 560 square miles. It borders on North Carolina, and is intersected by the French Broad River. Its surface is mountainous, and is partially covered with oak, hickory, sycamore, chestnut, walnut, maple, and pine timber. The soil in the valleys is rich and fertile. Fine limestone is quarried in the county. The staple products are wheat, corn, grass, cattle, and hogs. The grazing for cattle and sheep is abundant.

Sevierville, the county seat, is situated on Little Pigeon River, 30 miles southeast of Knoxville. It has churches, schools, and general stores.

The average assessed value of land in 1900 was \$4.11 per acre.

Number of manufacturing establishments in the county, 83; capital employed, \$146,234; amount of wages paid during the year, \$19,455; number of farms, 3,193; number of acres, 249,233; number of acres improved, 114,794; value of buildings, \$536,730; value of farming implements and machinery, \$132,770; value of live stock, \$567,380; value of products not fed to live stock, \$947,494; amount paid for farm labor during the year, \$39,060; total value of land and improvements, except buildings, \$1,977,750.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	586,900	Other cultivated grasses..	3,715
Wheat.....	128,220	Grains cut green for hay ..	675
Oats.....	34,510	Other forage crops.....	2,808
Other cereals	907	Sorghum sirup (gallons)..	44,976
Potatoes.....	16,302	Cotton (bales).....	7
Sweet potatoes.....	26,133	Tobacco (pounds)	47,140
Onions	1,765	Broom corn (pounds)	3,960
Beans	2,067	Dried fruit (pounds).....	11,770
Peas.....	10,940	Grapes (pounds)	37,859
Value of other vegetables..	\$34,495	Wine (gallons).....	39
Clover seed.....	992	Cider (barrels)	92
Other grass seed	339	Vinegar (barrels).....	48
Peanuts	72		
Apples	80,395		
Cherries.....	76		
Peaches	218		
Pears.....	498		
Plums and prunes.....	925		
	TONS.		
Wild grasses.....	22		
Millet.....	970		
Clover.....	2,574		

NUMBER OF FRUIT TREES.

Apple	117,784
Cherry	1,491
Peach	28,846
Pear.....	1,588
Plum and prune.....	4,838
Grapevines	2,675

Value of forest products..	\$43,627
Value of small fruits	1,170

POULTRY AND BEES.

Value of poultry on hand..	\$ 23,354 00
Value of poultry raised in 1899	55,780 00
Dozens of eggs produced in 1899	387,680
Value of bees on hand.....	11,584 00
Pounds of honey produced in 1899	42,530

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$129,721 00
Animals slaughtered	192,665 00
Total	<u>\$322,386 00</u>

LIVE STOCK ON HAND.

Cattle.....	11,908	Horses	4,108
Sheep.....	5,413	Mules	1,531
Hogs.....	23,220	Asses and burros.....	45

SULLIVAN COUNTY.

Population in 1900, 24,935; population in 1890, 20,879. This county has an area of 410 square miles, and borders on Virginia. Its surface is a beautiful, undulating valley, lying between the Cumberland and Appalachian ranges of mountains, and is drained by the Holston River and the head waters of the Tennessee River. The county has a fine growth of ash, walnut, beech, maple, oak, hemlock, chestnut, and hickory timber. The soil is fertile. There are splendid deposits of iron ore of high grade, also large deposits of limestone of splendid fluxing quality. The staple products are fruits, wheat, corn, oats, grasses, horses, cattle, hogs, poultry, butter, and eggs.

Bristol (Tenn.) is located in this county. It is the largest city between Knoxville, Tenn., and Roanoke, Va., and is 131 miles from Knoxville and Roanoke. One of the prettiest government buildings in the South is located here. The city has beautiful churches, fine colleges and schools, splendid banks, a fine courthouse, law and chancery court, and register's office. It has five railroads entering the city from north, south, east, and west, including the two great systems, the Southern Railway and the Norfolk and Western Railroad. Bristol has within a radius of 50 miles—including Upper East Tennessee, Southwest Virginia, and Western North Carolina—a territory as rich in mineral deposits as any to be found in the world. It has large lumber interests, the finest tannery in the South, a large paper mill, all varieties of manufacturing establishments, an electric street railway, gas and electric light companies, theaters, clubhouses, a board of trade, two telephone systems, and as fine a waterworks system as can be found anywhere. It has a splendid wholesale and retail trade. Bristol is the headquarters of the Virginia Iron, Coal and Coke Company (the second largest iron company in the South), its largest iron furnace being located here, with cheap iron ore, coal, coke, and

limestone near by—all of fine quality. The city of Bristol is located in both Tennessee and Virginia, about one-half in each. The population of Bristol, Tenn., in 1900 was 5,271, an increase of 59 per cent over the census of 1890.

Blountville, the county seat, is 9 miles southwest of Bristol.

The average assessed value of land in 1900 was \$7.47 per acre.

Number of manufacturing establishments in the county, 130; capital employed, \$865,813; amount of wages paid during the year, \$158,013; number of farms, 2,732; number of acres, 238,148; number of acres improved, 150,084; value of buildings, \$968,390; value of farming implements and machinery, \$179,680; value of live stock, \$688,568; value of products not fed to live stock, \$887,667; amount paid for farm labor during the year, \$52,240; total value of land and improvements, except buildings, \$2,715,310.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	570,150	Grains cut green for hay..	765
Wheat.....	197,200	Other forage crops.....	1,147
Oats.....	81,430	Sorghum cane sold.....	44
Other cereals.....	1,435	Sorghum sirup (gallons)...	22,308
Potatoes.....	33,560	Cotton (bales).....	6
Sweet potatoes.....	15,359	Tobacco (pounds).....	46,830
Onions.....	3,968	Broom corn (pounds).....	6,500
Beans.....	788	Dried fruit (pounds).....	64,790
Peas.....	236	Grapes (pounds).....	25,186
Value of other vegetables.....	\$32,533	Wine (gallons).....	115
Clover seed.....	966	Cider (barrels).....	420
Other grass seed.....	498	Vinegar (barrels).....	359
Peanuts	27		
Apples	106,892		
Cherries.....	172		
Peaches.....	510		
Pears	926		
Plums and prunes.....	126		
	TONS.		
Wild grasses.....	9		
Millet.....	857		
Clover.....	3,513		
Other cultivated grasses..	6,576		

NUMBER OF FRUIT TREES.

Apple	109,410
Cherry	2,385
Peach	20,165
Pear.....	2,317
Plum and prune	1,731
Grapevines.....	3,115

Value of forest products..	\$16,076
Value of small fruits.....	1,886

POULTRY AND BEES.

Value of poultry on hand.....	\$ 31,638 00
Value of poultry raised in 1899.....	67,293 00
Dozens of eggs produced in 1899.....	334,490
Value of bees on hand.....	11,474 00
Pounds of honey produced in 1899.....	44,600

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$114,790 00
Animals slaughtered	84,553 00
Total	\$199,343 00

LIVE STOCK ON HAND.

Cattle.....	13,761	Horses	5,170
Sheep.....	9,035	Mules.....	1,355
Hogs.....	19,344	Asses and burros.....	23

UNICOI COUNTY.

Population in 1900, 5,851; population in 1890, 4,619. This county has an area of 196 square miles, and borders on North Carolina. It is drained by the Nolachucky River, and is intersected by the Southern Railway. Its surface is mountainous. Cotton, corn, oats, grass, and live stock are the staple products.

Erwin, the county seat, is situated 15 miles south of Johnson City, on a branch of the Southern Railway. It has churches, schools, a weekly newspaper, and general stores.

The assessed value of land in 1900 was — per acre.

Number of manufacturing establishments in the county, 25; capital employed, \$110,215; amount of wages paid during the year, \$34,414; number of farms, 678; number of acres, 52,551; number of acres improved, 18,950; value of buildings, \$154,010; value of farming implements and machinery, \$30,610; value of live stock, \$110,308; value of products not fed to live stock, \$168,087; amount paid for farm labor during the year, \$22,290; total value of land and improvements, except buildings, \$422,150.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	84,050	Grains cut green for hay . . .	28
Wheat	13,280	Other forage crops . . .	390
Oats	19,150		
Other cereals	760	Sorghum sirup (gallons)	6,986
Potatoes	8,786	Tobacco (pounds)	3,180
Sweet potatoes	2,124	Broom corn (pounds) . .	30
Onions	1,525	Dried fruits (pounds) . .	48,820
Beans	500	Grapes (pounds)	1,734
Peas	27	Wine (gallons)	15
Value other vegetables . .	\$6,927	Cider (barrels)	40
Grass seed	4	Vinegar (barrels)	26
Peanuts	5		
Apples	67,175	NUMBER OF FRUIT TREES.	
Cherries	18	Apple	38,617
Peaches	2	Cherry	92
Pears	8	Peach	2,447
Plums and prunes	34	Pear	16
	TONS.	Plum and prune	56
Millet	109	Grapevines	136
Clover	299		
Other cultivated grasses.	965	Value forest products . .	\$28,817
		Value of small fruits . .	510

POULTRY AND BEES.

Value of poultry on hand.....	\$	4,748	00
Value of poultry raised in 1899.....		9,900	00
Dozens of eggs produced in 1899.....		44,150	
Value of bees on hand.....		2,957	00
Pounds of honey produced in 1899.....		18,360	

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 10,551 00
Animals slaughtered	14,451 00
	<hr/>
Total	\$ 25,002 00

LIVE STOCK ON HAND.

Cattle	2,454	Horses	622
Sheep	1,658	Mules	381
Hogs	3,645	Asses and burros	3

UNION COUNTY.

Population in 1900, 12,894; population in 1890, 11,459. This county has an area of 220 square miles. It is intersected by the Clinch River, and is bounded on the north by Powell's River. Its surface is mountainous and partly covered with hickory, oak, chestnut, and maple timber. There are also fine deposits of iron, zinc, lead ore, and marble in the county. The staple products are corn, oats, wheat, butter, and pork. The average price of improved land is about \$20 per acre. There is a large quantity of unimproved land in the county, which can be bought at about \$5 per acre. Pure water, pure air, and cheap homes offer inducements to home seekers.

Maynardville, the county seat, is situated in Raccoon Valley, 24 miles northeast of Knoxville, and has fine schools and churches.

The average assessed value of lands in 1900 was \$5.30 per acre.

Number of manufacturing establishments in the county, 64; capital employed, \$49,702; amount of wages paid during the year, \$4,655; number of farms, 1,952; number of acres, 152,918; number of acres improved, 80,654; value of buildings, \$312,360; value of farming implements and machinery, \$73,880; value of live stock, \$363,288; value of products not fed to live stock, \$535,406; amount paid for farm labor during the year, \$22,340; total value of land and improvements, except buildings, \$944,540.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	397,270	Other cultivated grasses	2,113
Wheat	42,510	Grains cut green for hay	177
Oats	31,020	Other forage crops . . .	1,769
Other cereals	300	Sorghum cane sold . . .	2
Potatoes	17,484	Sorghum sirup (gallons)	16,672
Sweet potatoes	17,345	Cotton (bales)	17
Onions	2,746	Tobacco (pounds)	22,360
Beans	1,461	Broom corn (pounds) . .	6,050
Peas	1,555	Dried fruits (pounds) . .	70,710
Value other vegetables	\$23,388	Grapes (pounds)	26,250
Clover seed	139	Wine (gallons)	97
Other grass seed	58	Cider (barrels)	178
Peanuts	40	Vinegar (barrels)	162
Apples	83,083		
Cherries	31	NUMBER OF FRUIT TREES.	
Peaches	575	Apple	84,222
Pears	474	Cherry	1,724
Plums and prunes	938	Peach	12,473
		Pear	1,522
		Plum and prune	3,350
	TONS.	Grapevines	1,546
Wild grasses	58	Value forest products . .	\$57,659
Millet	1,547	Value of small fruits . .	2,179
Clover	844		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 16,380 00
Value of poultry raised in 1899.....	35,320 00
Dozens of eggs produced in 1899.....	268,910
Value of bees on hand.....	6,445 00
Pounds of honey produced in 1899.....	30,670

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 66,842 00
Animals slaughtered	72,231 00
Total	\$139,073 00

LIVE STOCK ON HAND.

Cattle	6,204	Horses	2,760
Sheep	3,001	Mules	1,176
Hogs	12,875	Asses and burros	29

VAN BUREN COUNTY.

Population in 1900, 3,126; population in 1890, 2,863. This county has an area of 322 square miles. It is bounded on the north by the Cumberland River and Caney Fork River, and is drained by the Rock River. It is a hilly county. It has fertile valleys and fine grazing lands for sheep and cattle, and also fine forests of chestnut, hickory, oak, poplar, and wild cherry. The staple products are corn, grass, fruit, honey, ginseng, cattle, and pork. Grapes and other fruits grow splendidly in the county. The Nashville, Chattanooga and St. Louis Railway runs near the northern border of the county.

Spencer, the county seat, has good schools, churches, and general stores.

The average assessed value of land for 1900 was \$1.59 per acre.

Number of manufacturing establishments in the county, 14; capital employed, \$19,450; amount of wages paid during the year, \$3,830; number of farms, 482; number of acres, 83,401; number of acres improved, 24,229; value of buildings, \$100,080; value of farming implements and machinery, \$25,730; value of live stock, \$134,270; value of products not fed to live stock, \$155,137; amount paid for farm labor during the year, \$4,290; total value of land and improvements, except buildings, \$306,510.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	130,660	Other forage crops . . .	37
Wheat	13,020	Sorghum cane sold . . .	105
Oats	4,370		
Other cereals	250	Cotton (bales)	16
Potatoes	7,784	Tobacco (pounds)	6,790
Sweet potatoes	3,331	Dried fruits (pounds) . .	47,480
Onions	12	Grapes (pounds)	3,600
Beans	103	Wine (gallons)	220
Peas	491	Cider (barrels)	11
Value other vegetables .	\$6,157	Vinegar (barrels)	8
Apples	45,348		
Cherries	11	NUMBER OF FRUIT TREES	
Piums and prunes . . .	56	Apple	82,178
		Cherry	497
		Peach	4,782
		Pear	63
		Plum and prune	401
		Grapevines	847
		Value forest products . .	\$11,065
Wild grasses	5	Value of small fruits . .	28
Millet	186		
Clover	13		
Other cultivated grasses.	695		
Grains cut green for hay	445		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 4,320 00
Value of poultry raised in 1899.....	7,581 00
Dozens of eggs produced in 1899.....	39,690
Value of bees on hand.....	3,368 00
Pounds of honey produced in 1899.....	12,900

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 26,745 00
Animals slaughtered	16,512 00
Total	\$ 43,257 00

LIVE STOCK ON HAND.

Cattle	2,551	Horses	646
Sheep	2,480	Mules	518
Hogs	7,817	Asses and burros	40

WASHINGTON COUNTY.

Population in 1900, 22,604; population in 1890, 20,354. This county has an area of about 344 square miles, and is bounded on the northeast by the Watauga and Holston Rivers and intersected by the Nolachucky River. Its surface is diversified with mountains and valleys. It has forests of hickory, chestnut, maple, oak, pine, and other timber. Iron ore and building stone are found in paying quantities. The county is intersected by the Southern Railway.

Jonesboro, the county seat, is situated in a beautiful and fertile valley, on the Southern Railway. It has excellent schools, churches, a number of general stores, an iron foundry, and several manufacturing establishments. Its population in 1900 was 854.

The average assessed value of land in 1900 was \$9.79 per acre.

Number of manufacturing establishments in the county, 131; capital employed, \$1,747,681; amount of wages paid during the year, \$167,287; number of farms, 2,457; number of acres, 185,073; number of acres improved, 132,789; value of buildings, \$957,930; value of farming implements and machinery, \$186,760; value of live stock, \$581,785; value of products not fed to live stock, \$854,874; amount paid for farm labor during the year, \$79,170; total value of land and improvements, except buildings, \$2,473,060.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	359,630	Other cultivated grasses.	6,275
Wheat	294,940	Grains cut green for hay	1,026
Oats	83,890	Other forage crops . . .	4,406
Other cereals	4,600	Sorghum cane sold . . .	214
Potatoes	21,313	Sorghum sirup (gallons)	14,813
Sweet potatoes	14,226	Tobacco (pounds) . . .	63,660
Onions	868	Broom corn (pounds) . .	8,910
Beans	372	Dried fruits (pounds) . .	118,240
Peas	1,507	Grapes (pounds) . . .	126,260
Value other vegetables	\$33,712	Wine (gallons)	548
Clover seed	807	Cider (barrels)	696
Other grass seed	369	Vinegar (barrels)	636
Peanuts	7		
Apples	125,657		
Cherries	494		
Peaches	677		
Pears	941		
Plums and prunes . . .	352		
	TONS.		
Wild grasses	40		
Millet	919		
Clover	3,529		

NUMBER OF FRUIT TREES.

Apple	141,795
Cherry	5,886
Peach	46,049
Pear	3,006
Plum and prune	4,142
Grapevines	12,586
Value forest products .	\$46,563
Value of small fruits .	3,415

POULTRY AND BEES.

Value of poultry on hand.....	\$ 23,489 00
Value of poultry raised in 1899.....	62,748 00
Dozens of eggs produced in 1899.....	297,020
Value of bees on hand.....	8,775 00
Pounds of honey produced in 1899.....	34,410

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$120,109 00
Animals slaughtered	78,528 00
Total	\$198,637 00

LIVE STOCK ON HAND.

Cattle	12,249	Horses	4,978
Sheep	8,695	Mules	1,477
Hogs	16,077	Asses and burros	58

MIDDLE TENNESSEE.**BEDFORD COUNTY.**

Population in 1900, 23,845; population in 1890, 24,739. This county has an area of 550 square miles. It lies in the Central Basin, and its surface is rolling, with occasional flat-topped hills. The county is exceedingly well watered, Duck River flowing through it from east to west; and the farms are generally in a fine state of cultivation. The Nashville, Chattanooga and St. Louis Railway traverses the county. It has a splendid system of public schools, and the private schools are of a high character. The county is well supplied with churches of the various denominations.

Shelbyville, the county seat, is located on a branch of the Nashville, Chattanooga and St. Louis Railway. It has an electric light plant, a system of waterworks, a cotton factory, a hub and spoke factory, a foundry, sawmills, planing mills, flouring mills, and other manufacturing enterprises, with good schools and churches. There are two banks in the town and four in the county. There are three newspapers in the town. The population of the town in 1900 was 2,236.

There are five prosperous towns in the county—Bellbuckle, Wartrace, Normandy, Flat Creek, and Unionville. Bellbuckle is noted as an educational point.

The average assessed value of land in 1900 was \$11.53 per acre.

Number of manufacturing establishments in the county, 83; capital employed, \$432,154; amount of wages paid during the year, \$53,225; number of farms, 2,889; number of acres, 287,612; number of acres improved, 190,144; value of buildings, \$1,441,930; value of farming im-

plements and machinery, \$345,010; value of live stock, \$1,253,968; value of products not fed to live stock, \$1,537,455; amount paid for farm labor during the year, \$97,100; total value of land and improvements, except buildings, \$5,187,330.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,182,380	Other cultivated grasses	3,077
Wheat	465,920	Grains cut green for hay	3,524
Oats	55,020	Other forage crops . . .	1,126
Other cereals	13,780	Sorghum cane sold . . .	847
Potatoes	7,279	Sorghum sirup (gallons)	12,500
Sweet potatoes	15,468	Cotton (bales)	73
Onions	882	Tobacco (pounds)	2,610
Beans	278	Broom corn (pounds) . .	5,820
Peas	5,580	Dried fruits (pounds) . .	6,050
Value other vegetables	\$45,315	Grapes (pounds)	40,515
Clover seed	27	Wine (gallons)	19
Other grass seed	1,877	Cider (barrels)	118
Peanuts	83	Vinegar (barrels)	79
Apples	49,026		
Cherries	92	NUMBER OF FRUIT TREES.	
Peaches	220	Apple	86,521
Pears	200	Cherry	3,369
Plums and prunes	251	Peach	32,720
		Pear	1,435
		Plum and prune	4,138
		Grapevines	10,397
		Value forest products	\$116,191
		Value of small fruits . .	861
	TONS.		
Wild grasses	26		
Millet	2,629		
Clover	2,966		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 45,088 00
Value of poultry raised in 1899.....	90,032 00
Dozens of eggs produced in 1899.....	568,670
Value of bees on hand.....	4,522 00
Pounds of honey produced in 1899.....	19,680
Pounds of wax produced in 1899.....	850

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$316,066 00
Animals slaughtered	127,971 00
Total	\$444,037 00

LIVE STOCK ON HAND.

Cattle	14,691	Horses	8,437
Sheep	15,446	Mules	5,000
Hogs	33,972	Asses and burros	477

CANNON COUNTY.

Population in 1900, 12,121; population in 1890, 12,197. This county has an area of 280 square miles. It is drained by numerous small streams. Its surface is hilly and rolling, and its soil is very productive. Apples do well in this county. Corn, wheat, and hogs are the staple products.

Woodbury, the county seat, is located 50 miles southeast of Nashville. It has schools, churches, a bank, a newspaper, and a flouring mill.

The average assessed value of land in 1900 was \$7.16 per acre.

Number of manufacturing establishments in the county, 39; capital employed, \$50,205; amount of wages paid during the year, \$8,585; number of farms, 1,950; number of acres, 155,225; number of acres improved, 74,353; value of buildings, \$416,080; value of farming implements and machinery, \$110,340; value of live stock, \$548,196; value of products not fed to live stock, \$713,424; amount paid for farm labor during the year, \$34,590; total value of land and improvements, except buildings, \$1,395,270.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	779,240	Grains cut green for hay . . .	1,014
Wheat	96,840	Other forage crops . . .	556
Oats	27,510	Sorghum cane sold . . .	407
Other cereals	4,100		
Potatoes	5,261	Sorghum sirup (gallons) . . .	25,677
Sweet potatoes	8,979	Cotton (bales)	5
Onions	539	Tobacco (pounds)	33,860
Beans	193	Broom corn (pounds) . . .	9,920
Peas	6,022	Dried fruits (pounds) . . .	62,920
Value other vegetables . . .	\$30,174	Grapes (pounds)	1,356
Clover seed	5	Wine (gallons)	15
Other grass seed	1,348	Cider (barrels)	64
Peanuts	29	Vinegar (barrels)	44
Apples	80,157		
Cherries	110	NUMBER OF FRUIT TREES.	
Peaches	1,005	Apple	110,030
Pears	135	Cherry	1,924
Plums and prunes	247	Peach	15,448
		Pear	775
		Plum and prune	3,603
		Grapevines	262
Millet	2,834	Value forest products . . .	\$32,448
Clover	830	Value of small fruits . . .	167
Other cultivated grasses . . .	254		

POULTRY AND BEES.

Value of poultry on hand	\$ 22,716 00
Value of poultry raised in 1899	36,984 00
Dozens of eggs produced in 1899	422,270
Value of bees on hand	3,643 00
Pounds of honey produced in 1899	16,790
Pounds of wax produced in 1899	480

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$155,394 00
Animals slaughtered	78,535 00
Total	\$233,929 00

LIVE STOCK ON HAND.

Cattle	6,684	Horses	3,631
Sheep	6,060	Mules	2,918
Hogs	21,735	Asses and burros	134

CHEATHAM COUNTY.

Population in 1900, 10,112; population in 1890, 8,845. This county has an area of 400 square miles. It is intersected by the Cumberland River and drained by the Harpeth River. Its surface is rolling, and the soil is generally fertile. The county has a fine growth of timber. Corn, tobacco, and hogs are the staple products. The average price of improved lands is about \$20 per acre. The Nashville, Chattanooga and St. Louis Railway traverses a portion of the county.

Ashland City, the county seat, is situated on the Cumberland River, about 20 miles northwest of Nashville. It has a daily stage line connecting it with Nashville; and the Tennessee Central Railroad, in process of construction, will give it railroad connection with Nashville and Clarksville. It has a bank, a weekly newspaper, good schools, churches, and mercantile establishments.

The average assessed value of land in 1900 was \$5.36 per acre.

Number of manufacturing establishments in the county, 23; capital employed, \$130,010; amount of wages paid during the year, \$22,018; number of farms, 1,562; number of acres, 143,093; number of acres improved, 60,842; value of buildings, \$456,930; value of farming implements and machinery, \$112,050; value of live stock, \$361,139; value of products not fed to live stock, \$560,276; amount paid for farm labor during the year, \$32,100; total value of land and improvements, except buildings, \$1,276,860.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	476,230	Other cultivated grasses . . .	394
Wheat	44,370	Grains cut green for hay . . .	79
Oats	9,440	Other forage crops . . .	105
Other cereals	20	Sorghum cane sold . . .	125
Potatoes	7,381	Sorghum sirup (gallons) . . .	1,536
Sweet potatoes	7,996	Tobacco (pounds) . . .	2,129,760
Onions	1,565	Dried fruits (pounds) . . .	470
Beans	225	Grapes (pounds) . . .	13,733
Peas	1,560	Wine (gallons) . . .	10
Value other vegetables . . .	\$23,413	Cider (barrels) . . .	78
Peanuts	85	Vinegar (barrels) . . .	49
Apples	11,587		
Cherries	11		
Peaches	250		
Pears	130		
Plums and prunes . . .	1,043		
	TONS.		
Wild grasses	1		
Millet	533		
Clover	1,112		

NUMBER OF FRUIT TREES.

Apple	62,439
Cherry	14,453
Peach	26,832
Pear	3,458
Plum and prune	8,896
Grapevines	645
Value forest products . .	\$52,744
Value of small fruits . .	1,497

POULTRY AND BEES.

Value of poultry on hand	\$ 16,996 00
Value of poultry raised in 1899	31,666 00
Dozens of eggs produced in 1899	180,150
Value of bees on hand	884 00
Pounds of honey produced in 1899	6,380
Pounds of wax produced in 1899	260

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 26,990 00
Animals slaughtered	63,497 00
Total	\$ 90,487 00

LIVE STOCK ON HAND.

Cattle	4,267	Horses	1,609
Sheep	1,423	Mules	315
Hogs	12,980	Asses and burros	24

CLAY COUNTY.

Population in 1900, 8,421; population in 1890, 7,260. This county borders on Kentucky, and is intersected by the Cumberland River. It has 143,013 acres of land, and is drained by Obey's River. Its surface is hilly, and the soil in the valleys is very fertile. It has fine forests of beech, hickory, maple, oak, chestnut, etc. Corn, tobacco, wheat, oats, and hogs are the staple products.

Celina, the county seat, is located on the Cumberland River, at the mouth of Obey's River. It has good schools, churches, and a number of general stores.

The average assessed value of land in 1900 was \$4.97 per acre.

Number of manufacturing establishments in the county, 21; capital employed, \$21,930; amount of wages paid during the year, \$6,079; number of farms, 1,350; number of acres, 143,013; number of acres improved, 57,803; value of buildings, \$168,980; value of farming implements and machinery, \$56,130; value of live stock, \$283,616; value of products not fed to live stock, \$371,668; amount paid for farm labor during the year, \$13,520; total value of land and improvements, except buildings, \$718,040.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 8,904 00
Value of poultry raised in 1899.....	12,743 00
Dozens of eggs produced in 1899.....	114,110
Value of bees on hand.....	2,526 00
Pounds of honey produced in 1899.....	9,590
Pounds of wax produced in 1899.....	320

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$725,173 00
Animals slaughtered	108,382 00
	<hr/>
Total	\$833,555 00

LIVE STOCK ON HAND.

Cattle	14,721	Horses	4,793
Sheep	6,095	Mules	3,175
Hogs	29,098	Asses and burros	59

COFFEE COUNTY.

Population in 1900, 15,574; population in 1890, 13,827. This county is situated at the western base of Cumberland Mountain, and is 1,121 feet above the Silurian Basin of Middle Tennessee. It is near the center of the State, about 60 miles southeast of Nashville. The Nashville, Chattanooga and St. Louis Railway passes through the southwest portion of the county, and the McMinnville and Manchester Railway passes through the center. The soil of this county is a mixture of loam and sand, with a good clay subsoil, easily worked. It is capable of containing a great deal of moisture, not liable to break, and very susceptible of improvement by deep plowing, subsoiling, and manuring. A failure in crops from drought has not been known in this section for many years. Fruits and vegetables can be produced in great abundance. Many parts of the county are well adapted to vineyards and the production of wine. During the past five years it has been practically demonstrated that a superior quality of tobacco can be grown to great advantage. Corn, oats, rye, and other small grains are cultivated with much success. The leading staple, however, is wheat, for which this soil and climate seem peculiarly adapted to the production of a superior quality, and yearly it is grown in greater quantity. As a grass-growing and stock-growing county, it is unsurpassed. There is no county in the State better adapted for wool growing than this; and, in fact, all that extensive range of country known as the "tablelands" of the Cumberland Mountain is as well adapted to sheep raising as any section of equal extent in the United States. The surface of this county is level or gently undulating, except along the streams, where it is a little broken. The county is abundantly watered, abounding as it does in springs and brooks of ever-running freestone water, clear as crystal. Chalybeate, sulphur, and alum springs are also found. The two forks of Duck River

have their sources in this county, and their falls produce a water power and facilities for manufacturing purposes unsurpassed by any in the State. They unite just below the falls and within 1 mile of Manchester.

Manchester, the county seat, is situated on the North Fork of Duck River and on the Nashville, Chattanooga and St. Louis Railway. It has churches, schools, banks, water-works, newspapers, etc., with a population of about 1,200.

Tullahoma, a prosperous town of 3,000 inhabitants, is in this county and on the main line of the Nashville, Chattanooga and St. Louis Railway. Its schools are excellent; its church facilities are good; and it has numerous manufacturing industries, first-class hotels, a weekly newspaper, and a good electric light plant. It is a great summer resort.

The price of improved land in the county ranges from \$10 to \$50 per acre; unimproved land, from \$2 to \$8 per acre. There are excellent opportunities for profitable investment in cheap timber lands. The inducements the county offers to home seekers are a fine climate, good citizenship, good schools, and good churches.

The assessed value of land in 1900 was \$4.19 per acre.

Number of manufacturing establishments in the county, 69; capital employed, \$469,951; amount of wages paid during the year, \$101,727; number of farms, 1,956; number of acres, 193,788; number of acres improved, 97,420; value of buildings, \$463,730; value of farming implements and machinery, \$146,140; value of live stock, \$534,835; value of products not fed to live stock, \$735,124; amount paid for farm labor during the year, \$34,710; total value of land and improvements, except buildings, \$1,675,760.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	694,110	Grains cut green for hay	3,539
Wheat	156,630	Other forage crops . . .	1,182
Oats	19,650	Sorghum cane sold . . .	480
Other cereals	4,480		
Potatoes	7,821	Sorghum sirup (gallons)	21,539
Sweet potatoes	15,190	Cotton (bales)	3
Onions	394	Tobacco (pounds)	47,400
Beans	319	Broom corn (pounds) . .	12,630
Peas	5,776	Dried fruits (pounds) . .	92,910
Value other vegetables	\$27,229	Grapes (pounds)	30,242
Grass seed	28	Wine (gallons)	122
Peanuts	187	Cider (barrels)	116
Apples	123,043	Vinegar (barrels)	56
Cherries	88		
Peaches	9		
Pears	140		
Plums and prunes	498		
	TONS.		
Wild grasses	57		
Millet	1,168		
Clover	441		
Other cultivated grasses	1,806		

NUMBER OF FRUIT TREES.

Apple	125,749
Cherry	2,170
Peach	22,767
Pear	1,813
Plum and prune	5,072
Grapevines	4,157
Value forest products . .	\$31,349
Value of small fruits . .	474

POULTRY AND BEES.

Value of poultry on hand.....	\$ 17,715 00
Value of poultry raised in 1899.....	35,436 00
Dozens of eggs produced in 1899.....	320,960
Value of bees on hand.....	3,152 00
Pounds of honey produced in 1899.....	14,170
Pounds of wax produced in 1899.....	780

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$126,272 00
Animals slaughtered	75,056 00
Total	\$201,328 00

LIVE STOCK ON HAND.

Cattle	8,134	Horses	3,947
Sheep	6,306	Mules	2,545
Hogs	16,232	Asses and burros	125

CUMBERLAND COUNTY.

Population in 1900, 8,311; population in 1890, 5,376. This county has an area of nearly 800 square miles. It is situated centrally upon the Cumberland Plateau, at an elevation of about 2,000 feet above sea level, and is drained by affluents of both the Cumberland and Tennessee Rivers. The surface is gently undulating, generally covered with timber, and entirely covered during nine or ten months each year with a luxuriant growth of native grass, which constitutes it one of the very best grazing counties in the State. Coal is the most valuable possession, comprising two veins, known as the "Bon Air block vein" and the "Sewanee coking vein," than which no better coal exists. Four coal mines are in successful operation in the eastern and northern portions of the county, and two others are projected in the west and southwest.

Crossville, the county seat, is located on the Tennessee Central Railroad, about the center of the county. Its situation affords a commanding view of a wide extent of country and makes it a desirable summer resort. It has churches, schools, general stores, a bank, a weekly newspaper, and is the financial center of the rapidly-developing coal and timber industries.

The average price of improved land in the county ranges from \$10 to \$15 per acre. Coal and timber lands range in price from \$10 to \$15 per acre, while fine grazing lands may be bought at \$5 per acre. The opportunities for profitable investment in coal and timber lands and in stock raising, fruit growing, and other agricultural pursuits are excellent. Inducements to home seekers which the county offers are a healthful climate, pure water, hospitable and law-abiding citizenship, low price of lands, etc.

The average assessed value of land in 1900 was \$1.65 per acre.

Number of manufacturing establishments in the county, 26; capital employed, \$32,188; amount of wages paid

during the year, \$9,503; number of farms, 1,035; number of acres, 152,417; number of acres improved, 24,288; value of buildings, \$182,000; value of farming implements and machinery, \$44,530; value of live stock, \$246,828; value of products not fed to live stock, \$247,941; amount paid for farm labor during the year, \$9,600; total value of land and improvements, except buildings, \$463,300.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	117,690	Other cultivated grasses	1,503
Wheat	2,060	Grains cut green for hay	1,261
Oats	3,190	Other forage crops . . .	742
Other cereals	1,716	Sorghum cane sold . . .	4
Potatoes	31,710	Sorghum sirup (gallons)	11,516
Sweet potatoes	7,653	Tobacco (pounds) . . .	14,960
Onions	850	Dried fruits (pounds) . .	37,100
Beans	665	Grapes (pounds)	40,350
Peas	1,348	Cider (barrels)	75
Value other vegetables .	\$15,492	Vinegar (barrels)	18
Peanuts	5		
Apples	53,873		
Cherries	108		
Peaches	169		
Pears	38		
Plums and prunes	65		
	TONS.		
Wild grasses	389		
Millet	1,220		
Clover	247		

NUMBER OF FRUIT TREES.

Apple	61,215
Cherry	559
Peach	5,621
Pear	335
Plum and prune	575
Grapevines	4,772
Value forest products . .	\$19,023
Value of small fruits . .	1,021

POULTRY AND BEES.

Value of poultry on hand	\$ 5,291 00
Value of poultry raised in 1899	9,814 00
Dozens of eggs produced in 1899	80,810
Value of bees on hand	4,454 00
Pounds of honey produced in 1899	32,790
Pounds of wax produced in 1899	770

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 36,839 00
Animals slaughtered	28,359 00
Total	\$ 65,198 00

LIVE STOCK ON HAND.

Cattle	5,444	Horses	1,325
Sheep	9,532	Mules	923
Hogs	18,998	Asses and burros	33

DAVIDSON COUNTY.

Population in 1900, 122,815; population in 1890, 108,174. This county has an area of 508 square miles, and is intersected by the Cumberland River and Stone's River. Its surface is undulating, and in many localities it is well timbered. The soil is fertile and well adapted to diversified agriculture. The county successfully produces sixty-seven different field crops and fifty-four varieties of garden vegetables. The horticultural interests of the county are very considerable, and the conditions are favorable to this branch of industry. Ten varieties of berries are successfully grown in the county, and more than a dozen varieties of other fruits succeed well. There are twenty-one free turnpikes in the county, with a total mileage of 167 miles. The staple products are corn, wheat, oats, grass, fruits, cattle, hogs, and mules.

Nashville, the county seat, is located on the Cumberland River, at an elevation above sea level of 460 feet. The river at this point is practically navigable all the year around. Nashville is the capital of the State, and the Supreme Court and Court of Chancery Appeals for the Middle Division of the State hold their sessions here; the Federal Court for the Middle Division also holds its sessions here. The city has 140 miles of improved streets, 59 miles of sewers; owns its electric light plant; and is supplied with water from a reservoir having a capacity of 51,000,000 gallons. It has 72 miles of electric street railways, carrying passengers to any part of the city for a single fare of 5 cents. The Nashville, Chattanooga and St. Louis Railway; the Louisville and Nashville Railroad; the Tennessee Central Railroad; and the Cumberland River furnish excellent transportation facilities. The freight rates are as favorable as those enjoyed by any other city in the State. The city has recently granted a franchise to a projected line of suburban electric railways, which is to connect it with various points in the surrounding country. This line, when constructed, will add largely to the city's transportation fa-

cilities. The wholesale trade of Nashville amounts to over \$72,000,000 annually, and it is steadily increasing. It is the largest manufacturing city in the State, producing 17 per cent of the manufactured products of the State. The capital employed in manufacturing industries is a little over \$14,000,000, giving employment to 10,000 persons and annually disbursing \$2,889,241 in wages. It is one of the largest hardwood lumber markets in the United States. Its milling interests are larger than those of any other Southern city. It is the fourth boot-and-shoe market in the United States. Its bank clearings for 1902 show an average increase of 37 per cent over 1901. As an educational center, Nashville ranks second in the United States. Its public schools are of the highest grade, and its numerous private institutions of learning have made it famous in all the branches of education. It has the largest printing and publishing business of any city in the South, and its newspapers have a wide circulation and influence. It is in the front rank in the march of progress, growing and prospering daily. It wants more capital and more population.

The average assessed value of land in the county in 1900 was \$28.67 per acre.

The census of 1900 gives the following statistics of Davidson County: Number of manufacturing establishments in the county, 580; capital employed, \$15,024,878; amount of wages paid during the year, \$3,180,025; number of farms, 3,316; number of acres, 302,844; number of acres improved, 177,337; value of buildings, \$3,059,980; value of farming implements and machinery, \$470,550; value of live stock, \$1,486,389; value of products not fed to live stock, \$2,083,062; amount paid for farm labor during the year, \$272,860; total value of land and improvements, except buildings, \$9,663,080.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	726,960	Grains cut green for hay	6,124
Wheat	321,370	Other forage crops . . .	3,219
Oats	65,050	Sorghum cane sold . . .	701
Other cereals	8,760		
Potatoes	68,565	Sorghum sirup (gallons)	43,618
Sweet potatoes	100,760	Cotton (bales)	4
Onions	19,293	Tobacco (pounds)	224,900
Beans	248	Broom corn (pounds) . . .	8,170
Peas	8,570	Dried fruits (pounds) . .	230
Value other vegetables.	\$171,755	Grapes (pounds)	220,059
Grass seed	2	Wine (gallons)	2,215
Peanuts	115	Cider (barrels)	90
Apples	38,547	Vinegar (barrels)	48
Cherries	313		
Peaches	380		
Pears	1,549		
Plums and prunes	7,950		
	TONS.		
Wild grasses	15		
Millet	3,129		
Clover	3,496		
Other cultivated grasses	6,121		

NUMBER OF FRUIT TREES.

Apple	171,222
Cherry	7,771
Peach	64,615
Pear	12,577
Plum and prune	385
Grapevines	33,951

Value forest products . .	\$60,034
Value of small fruits . .	41,917

POULTRY AND BEES.

Value of poultry on hand.....	\$ 45,494 00
Value of poultry raised in 1899.....	86,251 00
Dozens of eggs produced in 1899.....	664,510
Value of bees on hand.....	5,090 00
Pounds of honey produced in 1899.....	23,870
Pounds of wax produced in 1899.....	440

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$274,320 00
Animals slaughtered	131,748 00
Total	\$406,068 00

LIVE STOCK ON HAND.

Cattle	21,818	Horses	14,733
Sheep	8,554	Mules	5,280
Hogs	22,911	Asses and burros	243

D'KALB COUNTY.

Population in 1900, 16,460; population in 1890, 15,650. This county has an area of 310 square miles, and is intersected by the Cumberland River and the Caney Fork River. Its surface is hilly in part and is well covered with forests. Its soil is fertile. The staple products are corn, wheat, and pork. The average price of improved land in the highlands ranges from \$2 to \$15 per acre; lowlands and river bottoms, from \$10 to \$75 per acre. The price of unimproved land in the highland country ranges from \$2 to \$5 per acre. The county has beds of kaolin and coal, and zinc and iron ore are found in different parts of the county. It is a splendid fruit-growing section. As a special inducement to home seekers may be mentioned the high and dry climate, good water, good schools, fine society, no droughts or epidemics.

Smithville, the county seat, is 60 miles east by south of Nashville. It has churches, schools, good general stores, a spoke and handle factory, flouring mills, a weekly newspaper, and a bank. The population of the town is 1,000.

Alexandria is a thriving town, with a weekly newspaper, schools, churches, and excellent commercial facilities.

The average assessed value of land in 1900 was \$7.23 per acre.

Number of manufacturing establishments in the county, 47; capital employed, \$71,548; amount of wages paid during the year, \$7,526; number of farms, 2,446; number of acres, 193,331; number of acres improved, 96,212; value of buildings, \$435,910; value of farming implements and machinery, \$121,130; value of live stock, \$672,621; value of products not fed to live stock, \$919,880; amount paid for farm labor during the year, \$20,630; total value of land and improvements, except buildings, \$1,655,140.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS.
Corn	917,730	Grains cut green for hay	334
Wheat	108,200	Other forage crops . . .	830
Oats	22,030	Sorghum cane sold . . .	131
Other cereals	1,850	Sorghum sirup (gallons)	34,195
Potatoes	8,494	Cotton (bales)	6
Sweet potatoes	14,336	Tobacco (pounds)	59,200
Onions	1,094	Broom corn (pounds) . .	1,220
Beans	498	Dried fruits (pounds) . .	129,580
Peas	12,174	Grapes (pounds)	18,767
Value other vegetables	\$26,001	Wine (gallons)	42
Clover seed	10	Cider (barrels)	141
Other grass seed	1,739	Vinegar (barrels)	101
Peanuts	8		
Apples	115,723	NUMBER OF FRUIT TREES.	
Cherries	43	Apple	127,137
Peaches	1,528	Cherry	1,751
Pears	105	Peach	28,670
Plums and prunes	357	Pear	1,058
		Plum and prune	13,934
		Grapevines	2,410
	TONS.		
Millet	3,214	Value forest products . .	\$49,279
Clover	901	Value of small fruits . .	96
Other cultivated grasses	1,618		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 26,443 00
Value of poultry raised in 1899.....	51,977 00
Dozens of eggs produced in 1899.....	594,730
Value of bees on hand.....	6,932 00
Pounds of honey produced in 1899.....	23,790
Pounds of wax produced in 1899.....	810

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$192,489 00
Animals slaughtered	106,333 00
Total	\$298,822 00

LIVE STOCK ON HAND.

Cattle	7,807	Horses	4,424
Sheep	7,035	Mules	3,478
Hogs	28,584	Asses and burros	185

DICKSON COUNTY.

Population in 1900, 18,635; population in 1890, 13,645. This county has an area of about 620 square miles, and is bounded on the northeast by the Cumberland River and partly drained by the Harpeth River. Its surface is undulating and in many localities covered with forests. Numerous stave factories are scattered throughout the county. Its soil is fertile, and its products are corn, tobacco, wheat, and pork. Celery is grown very satisfactorily in this county.

Charlotte, the county seat, is 12 miles from the Nashville, Chattanooga and St. Louis Railway. It has a weekly newspaper, churches, schools, and splendid commercial facilities.

Dickson, on the Nashville, Chattanooga and St. Louis Railway, is in this county, and is a flourishing town of 1,363 inhabitants, according to the census of 1900, which is an increase of 25 per cent over 1890. It has prosperous business houses of various kinds, good churches, a fine normal school (extensively patronized), a national bank, and weekly newspapers.

The average assessed value of land in 1900 was \$3.41 per acre.

Number of manufacturing establishments in the county, 79; capital employed, \$387,028; amount of wages paid during the year, \$122,155; number of farms, 2,209; number of acres, 237,881; number of acres improved, 88,676; value of buildings, \$519,060; value of farming implements and machinery, \$141,350; value of live stock, \$570,259; value of products not fed to live stock, \$709,613; amount paid for farm labor during the year, \$30,160; total value of land and improvements, except buildings, \$1,263,410.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	558,730	Other forage crops . . .	1,005
Wheat	58,290	Sorghum cane sold . . .	175
Oats	42,470		
Other cereals	158	Sorghum sirup (gallons)	15,600
Potatoes	7,402	Cotton (bales)	1
Sweet potatoes	15,179	Tobacco (pounds)	1,236,310
Onions	997	Broom corn (pounds) . .	2,580
Beans	594	Dried fruits (pounds) . .	2,200
Peas	5,554	Grapes (pounds)	29,157
Value other vegetables .	\$36,274	Wine (gallons)	119
Peanuts	604	Cider (barrels)	179
Apples	31,950	Vinegar (barrels)	55
Cherries	84		
Peaches	110		
Pears	230		
Plums and prunes . . .	775		
	TONS.		
Wild grasses	41		
Millet	551		
Clover	1,038		
Other cultivated grasses	1,597		
Grains cut green for hay	1,219		

NUMBER OF FRUIT TREES.

Apple	68,430
Cherry	1,631
Peach	38,580
Pear	1,786
Plum and prune	5,545
Grapevines	5,156
Value forest products .	\$80,762
Value of small fruits . .	536

POULTRY AND BEES.

Value of poultry on hand.....	\$ 19,353 00
Value of poultry raised in 1899.....	29,963 00
Dozens of eggs produced in 1899.....	286,710
Value of bees on hand.....	3,663 00
Pounds of honey produced in 1899.....	16,970
Pounds of wax produced in 1899.....	980

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 85,117 00
Animals slaughtered	90,080 00
Total	\$175,197 00

LIVE STOCK ON HAND.

Cattle	8,075	Horses	2,668
Sheep	5,391	Mules	3,249
Hogs	21,885	Asses and burros	77

FENTRESS COUNTY.

Population in 1900, 6,106; population in 1890, 5,226. This county has an area of about 510 square miles. It borders on Kentucky, and is drained by the Cumberland River and Obey's River. Its surface is marked by hills and high table-lands. It has fine timber and coal. The range for stock is splendid. There are good opportunities for investments in oil, timber, and coal lands. The staple products of the county are corn, wheat, pork, and cattle. The county is well adapted to sheep raising. The average price of land is about \$4 per acre.

Jamestown, the county seat, is situated 70 miles northwest of Knoxville. It has a weekly newspaper, schools, churches, and general mercantile establishments.

The average assessed value of land in 1900 was \$2.16 per acre.

Number of manufacturing establishments in the county, 21; capital employed, \$41,545; amount of wages paid during the year, \$4,658; number of farms, 972; number of acres, 177,022; number of acres improved, 37,607; value of buildings, \$140,580; value of farming implements and machinery, \$45,230; value of live stock, \$211,847; value of products not fed to live stock, \$236,145; amount paid for farm labor during the year, \$11,040; total value of land and improvements, except buildings, \$507,440.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	155,570	Grains cut green for hay . . .	72
Wheat	4,610	Other forage crops . . .	103
Oats	9,140	Sorghum cane sold . . .	188
Other cereals	1,440		
Potatoes	15,293	Sorghum sirup (gallons) . . .	3,900
Sweet potatoes	9,650	Tobacco (pounds) . . .	16,690
Onions	1,207	Broom corn (pounds) . . .	960
Beans	957	Dried fruits (pounds) . . .	49,260
Peas	1,075	Grapes (pounds) . . .	15,839
Value other vegetables . . .	\$11,503	Cider (barrels)	129
Peanuts	13	Vinegar (barrels)	61
Apples	79,732		
Cherries	2	NUMBER OF FRUIT TREES.	
Peaches	3	Apple	74,737
Pears	16	Cherry	479
Plums and prunes	16	Peach	7,055
		Pear	382
		Plum and prune	809
		Grapevines	3,993
Wild grasses	267	Value forest products . . .	\$27,430
Millet	316	Value of small fruits . . .	246
Clover	675		
Other cultivated grasses . . .	297		

POULTRY AND BEES.

Value of poultry on hand	\$ 5,365 00
Value of poultry raised in 1899	11,099 00
Dozens of eggs produced in 1899	75,570
Value of bees on hand	4,164 00
Pounds of honey produced in 1899	27,210
Pounds of wax produced in 1899	690

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 25,616 00
Animals slaughtered	30,998 00
Total	\$ 56,614 00

LIVE STOCK ON HAND.

Cattle	4,195	Horses	956
Sheep	4,844	Mules	741
Hogs	11,755	Asses and burros	31

FRANKLIN COUNTY.

Population in 1900, 20,392; population in 1890, 18,929. This county has an area of 570 square miles, and is drained by Elk River and numerous small streams. A portion of its surface is embraced in the Cumberland Mountain. The surface is hilly or table-lands, and in many localities there is a fine growth of timber. Its soil is partly fertile. Tobacco can be grown with profit. Corn, wheat, and hogs are the staple products. The Nashville, Chattanooga and St. Louis Railway intersects the county.

Winchester, the county seat, is situated on a branch of the Nashville, Chattanooga and St. Louis Railway and on Elk River, 85 miles southwest of Nashville. It has good schools and churches, two weekly newspapers, and is a first-class county town, surrounded by beautiful scenery. The Paulist Fathers have a beautiful retreat of over 300 acres near the town. The population of the town in 1900 was 1,338.

The average assessed value of land in 1900 was \$5.29 per acre.

Number of manufacturing establishments in the county, 59; capital employed, \$234,793; amount of wages paid during the year, \$72,327; number of farms, 2,342; number of acres, 254,441; number of acres improved, 128,983; value of buildings, \$717,990; value of farming implements and machinery, \$218,130; value of live stock, \$631,732; value of products not fed to live stock, \$1,062,856; amount paid for farm labor during the year, \$60,820; total value of land and improvements, except buildings, \$2,274,580.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	868,670	Other cultivated grasses	1,464
Wheat	323,760	Grains cut green for hay	4,643
Oats	33,620	Other forage crops . . .	2,412
Other cereals	2,332		
Potatoes	7,644	Cotton (bales)	29
Sweet potatoes	21,458	Tobacco (pounds) . . .	26,140
Onions	757	Broom corn (pounds) . .	1,100
Beans	388	Dried fruits (pounds) . .	890
Peas	10,670	Grapes (pounds)	72,952
Value other vegetables	\$33,096	Wine (gallons)	1,148
Clover seed	29	Cider (barrels)	86
Other grass seed	673	Vinegar (barrels)	58
Peanuts	154		
Apples	48,143	NUMBER OF FRUIT TREES.	
Cherries	21	Apple	93,731
Peaches	135	Cherry	1,289
Pears	140	Peach	22,465
Plums and prunes	124	Pear	1,074
		Plum and prune	1,612
		Grapevines	28,688
	TONS.		
Wild grasses	92	Value forest products . .	\$35,962
Millet	1,217	Value of small fruits . .	1,096
Clover	558		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 23,099 00
Value of poultry raised in 1899.....	45,559 00
Dozens of eggs produced in 1899.....	360,220
Value of bees on hand.....	5,383 00
Pounds of honey produced in 1899.....	32,160
Pounds of wax produced in 1899.....	940

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$107,717 00
Animals slaughtered	94,691 00
Total	\$202,408 00

LIVE STOCK ON HAND.

Cattle	10,541	Horses	4,444
Sheep	3,745	Mules	2,989
Hogs	25,055	Asses and burros	90

GILES COUNTY.

Population in 1900, 33,035; population in 1890, 34,957. This county borders on Alabama, and has an area of 656 square miles. It is drained by Elk River and Richland Creek. Its surface is undulating, and many parts of the county are well timbered with oak, ash, hickory, locust, poplar, and cedar. The soil is very productive. It is one of the few cotton-producing counties in the Middle Division. Corn, cotton, wheat, cattle, hogs, and fruit are the staple products. The county is intersected by the Louisville and Nashville Railroad.

Pulaski, the county seat, is located on Richland Creek and the Louisville and Nashville Railroad, 81 miles south by west of Nashville. It is an up-to-date town of 2,838 population in 1900. It has two newspapers, strong banks, fine churches and schools, and flourishing mercantile establishments. It ships from 8,000 to 10,000 bales of cotton annually.

The average assessed value of land in 1900 was \$9.55 per acre.

Number of manufacturing establishments in the county, 199; capital employed, \$304,846; amount of wages paid during the year, \$65,874; number of farms, 4,276; number of acres, 340,702; number of acres improved, 224,783; value of buildings, \$1,438,850; value of farming implements and machinery, \$329,370; value of live stock, \$1,263,235; value of products not fed to live stock, \$1,784,432; amount paid for farm labor during the year, \$82,630; total value of land and improvements, except buildings, \$4,445,400.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,798,040	Other cultivated grasses	1,099
Wheat	265,110	Grains cut green for hay	1,466
Oats	69,310	Other forage crops . . .	2,300
Other cereals	8,330	Sorghum cane sold . . .	2,079
Potatoes	6,141	Sorghum sirup (gallons)	40,536
Sweet potatoes	10,486	Cotton (bales)	6,122
Onions	644	Tobacco (pounds)	6,250
Beans	604	Broom corn (pounds) . .	3,490
Peas	18,181	Dried fruits (pounds) . .	11,280
Value other vegetables	\$49,455	Grapes (pounds)	44,349
Clover seed	3	Wine (gallons)	2
Other grass seed	1,559	Cider (barrels)	48
Peanuts	262	Vinegar (barrels)	35
Apples	42,217		
Cherries	28	NUMBER OF FRUIT TREES.	
Peaches	400	Apple	104,339
Pears	566	Cherry	1,907
Plums and prunes	328	Peach	54,784
		Pear	6,789
		Plum and prune	7,559
		Grapevines	6,285
	TONS	Value forest products	\$107,156
Wild grasses	21	Value of small fruits . .	916
Millet	1,694		
Clover	1,284		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 48,942 00
Value of poultry raised in 1899.....	90,062 00
Dozens of eggs produced in 1899.....	588,880
Value of bees on hand.....	5,213 00
Pounds of honey produced in 1899.....	32,640
Pounds of wax produced in 1899.....	1,680

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$295,339	00
Animals slaughtered	156,627	00
		<hr/>
Total	\$451,966	00

LIVE STOCK ON HAND.

Cattle	19,123	Horses	9,013
Sheep	9,631	Mules	5,551
Hogs	41,430	Asses and burros	299

GRUNDY COUNTY.

Population in 1900, 7,802; population in 1890, 6,345. This county lies on the southern border of the Middle Division, and bounds the Eastern Division of the State on the north and west.

Altamont, the county seat, is on the Cumberland Mountain, 140 miles southeast of Nashville.

Tracy City, the principal town, also on the Cumberland Mountain, 13 miles south of Altamont, has a population of 3,000. It is a mining town, the mines being operated by 600 resident miners, who are excellent citizens. It is on the line of the Nashville, Chattanooga and St. Louis Railway, and is the terminus of a branch road from Cowan by way of the University of the South, at Sewanee.

Gruetli, a Swiss settlement and village, is located on the Cumberland Mountain, 4½ miles southeast of Altamont. The Swiss settlers are all doing well, and have nicely-arranged mountain farms, producing grapes, which are manufactured into excellent wine.

The county produces an abundance of vegetables, such as potatoes, cabbage, onions, etc. It also produces hay and different grains, such as corn, rye, and oats. Elk River drains the Cumberland Mountain from the east and south, and the Collins River drains it from the east and north. The county has an area of 325 square miles. It is 1,800 feet above sea level, and the mountain portion of it is about 2,200 feet above sea level. The average price of improved land in the valleys is about \$20 per acre; on the mountain, \$2.50. There is considerable unimproved land for sale at about \$1.50 per acre, also unimproved valley land at \$12.50 per acre. There are opportunities for investment of capital in coal, timber, and agricultural lands. The inducements to home seekers are cheap lands, fine climate, hospitable people, and good citizenship, with good school and church facilities.

POULTRY AND BEES.

Value of poultry on hand.....	\$ 4,153 00
Value of poultry raised in 1899.....	7,304 00
Dozens of eggs produced in 1899.....	54,630
Value of bees on hand.....	3,961 00
Pounds of honey produced in 1899.....	20,160
Pounds of wax produced in 1899.....	840

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 20,421 00
Animals slaughtered	23,303 00
Total	\$ 43,724 00

LIVE STOCK ON HAND.

Cattle	3,776	Horses	1,070
Sheep	1,277	Mules	749
Hogs	8,472	Asses and burros	31

HICKMAN COUNTY.

Population in 1900, 16,367; population in 1890, 14,499. This county has an area of 640 square miles, and is intersected by Duck River. The soil is very fertile. The southwestern portion of the county is especially adapted to cattle and hog raising, and the eastern portion, which embraces Duck River Valley, produces wheat, corn, oats, blue grass, and other grasses. The uplands are suitable for tobacco, small grain, and fruit growing. A large part of this section is unimproved and would make beautiful homes for home seekers. The uplands are covered with a fine growth of oak, poplar, and chestnut, with some hickory and walnut. There are a number of stove manufacturing factories in portions of the county. The staple products are corn, wheat, pork, peanuts, and mules.

Around Centerville, the county seat, rich phosphate mines are located, and south of Centerville are rich beds of iron ore. There are three large iron furnaces in the county. At the present time only one of these is in operation. Centerville has a weekly newspaper, schools, churches, banks, and live and enterprising merchants.

The Nashville, Chattanooga and St. Louis Railway runs through the mineral and timber portions of the county. The county, being located in the highest latitude, is noted for its healthful and delightful climate. The average price of improved upland is about \$15 per acre; creek bottom land, about \$40; river bottom land, about \$60. There is considerable unimproved land at from \$3 to \$5 per acre. There are six rolling mills, one handle factory, a number of sawmills, and one cotton mill in the county. It is suggested that a plant to clean and dry phosphate would prove a good investment, also a fertilizer factory, and one or two furnaces to work up the iron ore. Fruit growing, tobacco culture, cattle and sheep raising are all profitable agricultural pursuits, and there are large bodies of land in the county especially adapted to this business for sale at reasonable prices.

The average assessed value of land in 1900 was \$3.72 per acre.

Number of manufacturing establishments in the county, 76; capital employed, \$477,239; amount of wages paid during the year, \$80,004; number of farms, 1,883; number of acres, 242,815; number of acres improved, 87,673; value of buildings, \$524,080; value of farming implements and machinery, \$140,500; value of live stock, \$719,719; value of products not fed to live stock, \$978,028; amount paid for farm labor during the year, \$42,780; total value of land and improvements, except buildings, \$1,720,250.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	990,090	Grains cut green for hay	2,027
Wheat	92,710	Other forage crops . . .	1,417
Oats	49,590	Sorghum cane sold . . .	829
Other cereals	870		
Potatoes	7,775	Sorghum sirup (gallons)	22,641
Sweet potatoes	15,286	Cotton (bales)	10
Onions	1,323	Tobacco (pounds)	8,190
Beans	451	Broom corn (pounds) . .	1,680
Peas	12,173	Dried fruits (pounds) . .	6,410
Value other vegetables	\$41,367	Grapes (pounds)	9,433
Clover seed	80	Wine (gallons)	25
Peanuts	55,039	Cider (barrels)	137
Apples	43,441	Vinegar (barrels)	43
Cherries	27		
		NUMBER OF FRUIT TREES.	
Peaches	7,397	Apple	44,557
Pears	579	Cherry	641
Plums and prunes . . .	890	Peach	26,875
		Pear	1,617
		Plum and prune	6,010
		Grapevines	1,770
	TONS	Value forest products	\$83,948
Wild grasses	18	Value of small fruits . .	124
Millet	653		
Clover	1,258		
Other cultivated grasses	1,180		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 25,423 00
Value of poultry raised in 1899.....	36,432 00
Dozens of eggs produced in 1899.....	308,370
Value of bees on hand.....	5,691 00
Pounds of honey produced in 1899.....	27,890
Pounds of wax produced in 1899.....	1,380

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$166,490 00
Animals slaughtered	110,212 00
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Total	\$276,702 00

LIVE STOCK ON HAND.

Cattle	8,840	Horses	2,690
Sheep	6,865	Mules	3,959
Hogs	25,530	Asses and burros	126

HOUSTON COUNTY.

Population in 1900, 6,476; population in 1890, 5,390. This county has an area of 210 square miles. It is bounded on the north by the Cumberland River; on the west, by the Tennessee River. Its surface is hilly, and the soil is fertile. The county is moderately well supplied with timber. The staple products are tobacco, corn, grass, and fruit. It is traversed by the Louisville and Nashville Railroad. The average price of improved land is \$6 per acre. A large quantity of unimproved land ranges from \$1 to \$2 per acre. The county has good schools, churches, an abundant supply of water, and the climate is healthful. There are opportunities for profitable investments in cattle, also in mining. The indications for coal oil are as good as any elsewhere in the State.

Erin, the county seat, is located near the Cumberland River, 28 miles southwest of Clarksville. It has churches, schools, general stores, a weekly newspaper, a wagon factory, and a sawmill.

The average assessed value of land in 1900 was \$3.89 per acre.

Number of manufacturing establishments in the county, 20; capital employed, \$151,690; amount of wages paid during the year, \$62,732; number of farms, 693; number of acres, 75,410; number of acres improved, 25,714; value of buildings, \$137,490; value of farming implements and machinery, \$34,640; value of live stock, \$174,507; value of products not fed to live stock, \$199,120; amount paid for farm labor during the year, \$6,480; total value of land and improvements, except buildings, \$353,770.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	197,710	Other cultivated grasses	404
Wheat	9,930	Grains cut green for hay	425
Oats	6,360	Other forage crops . . .	143
Other cereals	20	Sorghum cane sold . . .	20
Potatoes	6,459		
Sweet potatoes	7,524	Sorghum sirup (gallons)	6,241
Onions	85	Tobacco (pounds) . . .	494,260
Beans	63	Dried fruits (pounds) . .	550
Peas	490	Cider (barrels)	8
Value other vegetables .	\$9,441	Vinegar (barrels)	4
Peanuts	163		
Apples	4,221		
Cherries	3		
Peaches	16		
Plums and prunes	101		
	TONS.		
Wild grasses	2		
Millet	475		
Clover	543		

NUMBER OF FRUIT TREES.

Apple	11,026
Cherry	31
Peach	2,645
Pear	570
Plum and prune	445
Value forest products	\$11,552
Value of small fruits . .	262

POULTRY AND BEES.

Value of poultry on hand.....	\$ 6,372 00
Value of poultry raised in 1899.....	10,019 00
Dozens of eggs produced in 1899.....	88,830
Value of bees on hand.....	1,242 00
Pounds of honey produced in 1899.....	6,230
Pounds of wax produced in 1899.....	300

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 18,674 00
Animals slaughtered	30,051 00
Total	\$ 48,725 00

LIVE STOCK ON HAND.

Cattle	3,016	Horses	829
Sheep	1,883	Mules	1,089
Hogs	8,038	Asses and burros	26

HUMPHREYS COUNTY.

Population in 1900, 13,398; population in 1890, 11,720. This county has an area of 420 square miles, and is bounded on the west by the Tennessee River. Its surface is partly hilly, but immense bodies of the richest land lie along Duck River and in the valley of the Tennessee River. In some localities forests of ash, oak, walnut, beech, and hickory are found. This is one of the few good peanut-producing counties in the State. Corn, wheat, peanuts, grass, and pork are the staple products. The Nashville, Chattanooga and St. Louis Railway traverses the county.

Waverly, the county seat, is located on the Nashville, Chattanooga and St. Louis Railway. It has churches and schools, general stores, a weekly newspaper, and a national bank, and is one of the largest shipping points in the State for peanuts. Its population in 1900 was 786.

McEwen is a flourishing town on the Nashville, Chattanooga and St. Louis Railway. It has fine schools, a weekly newspaper, and prosperous mercantile establishments.

The average assessed value of land in 1900 was \$4.40 per acre.

Number of manufacturing establishments in the county, 67; capital employed, \$202,194; amount of wages paid during the year, \$50,684; number of farms, 1,643; number of acres, 235,369; number of acres improved, 69,095; value of buildings, \$392,170; value of farming implements and machinery, \$106,610; value of live stock, \$532,034; value of products not fed to live stock, \$694,559; amount paid for farm labor during the year, \$39,040; total value of land and improvements, except buildings, \$1,556,760.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	856,670	Grains cut green for hay	3,186
Wheat	8,280	Other forage crops . . .	320
Oats	34,710	Sorghum cane sold . . .	14
Other cereals	2		
Potatoes	8,992	Sorghum sirup (gallons)	16,973
Sweet potatoes	14,765	Tobacco (pounds) . . .	20,900
Onions	168	Broom corn (pounds) . .	1,680
Beans	123	Dried fruits (pounds) . .	9,510
Peas	4,197	Grapes (pounds)	11,012
Value other vegetables .	\$21,893	Wine (gallons)	8
Grass seed	40	Cider (barrels)	66
Peanuts	197,469	Vinegar (barrels)	26
Apples	17,869		
Cherries	1		
Peaches	115		
Pears	372		
Plums and prunes . . .	848		
	TONS.		
Wild grasses	16		
Millet	1,179		
Clover	712		
Other cultivated grasses	904		

NUMBER OF FRUIT TREES.

Apple	32,917
Cherry	886
Peach	16,944
Pear	1,195
Plum and prune	3,448
Grapevines	1,597

Value forest products .	\$57,995
Value of small fruits . .	176

POULTRY AND BEES.

Value of poultry on hand.....	\$ 15,560 00
Value of poultry raised in 1899.....	27,900 00
Dozens of eggs produced in 1899.....	214,100
Value of bees on hand.....	4,803 00
Pounds of honey produced in 1899.....	11,800
Pounds of wax produced in 1899.....	1,400

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 90,905 00
Animals slaughtered	76,631 00
Total	\$167,536 00

LIVE STOCK ON HAND.

Cattle	8,672	Horses	2,184
Sheep	4,944	Mules	3,046
Hogs	21,348	Asses and burros	51

JACKSON COUNTY.

Population in 1900, 15,039; population in 1890, 13,325. This county has an area of 280 square miles. It is intersected by the Cumberland River. The surface of the county is hilly and well covered with timber, and its soil is fertile. It is a good county for sheep and cattle raising, having fine pasture lands. The staple products are corn, wheat, grass, cattle, and pork. The average price of improved land is \$10 per acre. There are opportunities for investment of capital in timber lands, and in some sections of the county coal oil is found. It is a splendid county for fruit growing. Land is cheap and fertile and convenient to railroad and river. The county is well supplied with schools.

The county seat, Gainesboro, is situated near the right bank of the Cumberland River, 68 miles east of Nashville by land. It has churches, a bank, a weekly newspaper, and general stores.

The average assessed value of land for 1900 was \$6.13 per acre.

Number of manufacturing establishments in the county, 35; capital employed, \$53,930; amount of wages paid during the year, \$14,269; number of farms, 2,365; number of acres, 175,842; number of acres improved, 81,560; value of buildings, \$349,830; value of farming implements and machinery, \$89,020; value of live stock, \$544,751; value of products not fed to live stock, \$768,987; amount paid for farm labor during the year, \$29,800; total value of land and improvements, except buildings, \$1,532,770.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS
Corn	912,960	Other forage crops . . .	866
Wheat	54,590	Sorghum cane sold . . .	25
Oats	23,370		
Other cereals	780	Sorghum sirup (gallons)	47,011
Potatoes	9,135	Cotton (bales)	3
Sweet potatoes	15,654	Tobacco (pounds) . . .	387,520
Onions	675	Broom corn (pounds) . .	2,090
Beans	549	Dried fruits (pounds) . .	81,850
Peas	15,842	Grapes (pounds)	6,608
Value other vegetables	\$39,099	Wine (gallons)	3
Peanuts	17	Cider (barrels)	80
Apples	69,281	Vinegar (barrels)	53
Cherries	62		
Peaches	665		
Pears	363		
Plums and prunes . . .	3,478		
	TONS.		
Wild grasses	56		
Millet	786		
Clover	768		
Other cultivated grasses	177		
Grains cut green for hay	1,393		

NUMBER OF FRUIT TREES.

Apple	76,352
Cherry	1,068
Peach	17,972
Pear	1,663
Plum and prune	36,397
Grapevines	778

Value forest products . .	\$52,752
Value of small fruits . .	32

POULTRY AND BEES.

Value of poultry on hand.....	\$ 23,534 00
Value of poultry raised in 1899.....	47,151 00
Dozens of eggs produced in 1899.....	318,310
Value of bees on hand.....	6,651 00
Pounds of honey produced in 1899.....	27,850
Pounds of wax produced in 1899.....	930

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$144,925 00
Animals slaughtered	86,243 00
Total	\$231,168 00

LIVE STOCK ON HAND.

Cattle	7,770	Horses	3,075
Sheep	6,289	Mules	2,538
Hogs	24,595	Asses and burros	60

LAWRENCE COUNTY.

Population in 1900, 15,402; population in 1890, 12,286. This county has an area of 676 square miles. Its surface is diversified in the southern section and well timbered; the section north of Lawrenceburg is nearly level. The price of improved land varies from \$5 to \$40 per acre. Much of it is wild and covered with timber. This land sells for a nominal price—say, from \$1 to \$2.50 per acre. There are large areas of this land suitable for grazing, and the sheep industry is being introduced with success. There are excellent beds of iron ore in the southern part. There are also deposits of phosphate in the vicinity of Lawrenceburg and Pleasant Point which have not yet been developed. Farms can be bought on very reasonable terms. Its school and church facilities are equal to those of many wealthier counties. It is practically a “dry” county, the saloons having been voted out of the county seat under the 2,000-population extension of the four-mile law. There are a number of thriving little towns in the county, which afford good trade centers for their respective communities. That which promises more than all else in the upbuilding of the county is the cultivation of tobacco. This industry has been tried for the past few years with marked success. It seems that the cheapest grade of land in the county is proving to be the best tobacco land, a fact which means much for the increase in wealth of the county where the tobacco industry has been established. The staple products of the country are corn, cotton, wheat, grass, and pork.

Lawrenceburg, the county seat, is situated on the Louisville and Nashville Railroad and Shoal Creek, 74 miles southwest of Nashville. It has fine churches, schools, a good electric light system, a bank, a weekly newspaper, a lumber mill, a planing mill, and well-built houses.

The average assessed value of land in 1900 was \$2.95 per acre.

POULTRY AND BEES.

Value of poultry on hand.....	\$ 11,902 00
Value of poultry raised in 1899.....	18,777 00
Dozens of eggs produced in 1899.....	194,360
Value of bees on hand.....	4,527 00
Pounds of honey produced in 1899.....	18,870
Pounds of wax produced in 1899.....	1,500

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 37,625 00
Animals slaughtered	62,235 00
Total	\$ 99,860 00

LIVE STOCK ON HAND.

Cattle	6,520	Horses	2,621
Sheep	5,590	Mules	1,732
Hogs	17,797	Asses and burros	40

LEWIS COUNTY.

Population in 1900, 4,455; population in 1890, 2,555. This county has an area of 280 square miles, and is drained by Duck River and Buffalo River. Its surface is uneven and hilly, with a fine growth of timber. It is one of the best peanut-producing counties in the State. It is intersected by the Nashville, Chattanooga and St. Louis Railway. Its staple products are corn, wheat, peanuts, grass, oats, and pork. The average price of improved land is about \$25 per acre. There is a large amount of unimproved land in the county for sale at about \$2 per acre. Iron ore, oxide of iron, and ocher are found in the county. The county is fast developing as a wheat-growing section. Lands heretofore called "barren" are producing from 25 to 30 bushels to the acre. This wheat was sown after two crops of stock peas on land that originally cost about \$2 per acre. Water power in the county is good.

Hohenwald is the county seat. It has a weekly newspaper, fine schools and churches, and flourishing mercantile establishments.

The average assessed value of land in 1900 was \$3.01 per acre.

Number of manufacturing establishments in the county, 24; capital employed, \$323,302; amount of wages paid during the year, \$40,419; number of farms, 540; number of acres, 62,282; number of acres improved, 15,967; value of buildings, \$89,160; value of farming implements and machinery, \$31,700; value of live stock, \$138,196; value of products not fed to live stock, \$150,286; amount paid for farm labor during the year, \$3,190; total value of land and improvements, except buildings, \$350,600.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	138,750	Grains cut green for hay . . .	631
Wheat	5,060	Other forage crops . . .	484
Oats	2,350	Sorghum cane sold . . .	7
Other cereals	210	Sorghum sirup (gallons) . . .	7,308
Potatoes	2,495	Tobacco (pounds) . . .	7,560
Sweet potatoes	3,389	Broom corn (pounds) . . .	200
Onions	49	Dried fruits (pounds) . . .	3,180
Beans	173	Grapes (pounds) . . .	4,029
Peas	1,534	Wine (gallons)	186
Value other vegetables . . .	\$10,803	Cider (barrels)	12
Peanuts	4,343	Vinegar (barrels)	2
Apples	6,946		
Cherries	1		
Pears	13		
Plums and prunes	58		
	TONS.		
Wild grasses	17		
Millet	109		
Clover	543		
Other cultivated grasses . . .	17		

NUMBER OF FRUIT TREES.

Apple	12,641
Cherry	1,283
Peach	9,524
Pear	1,608
Plum and prune	4,924
Grapevines	13,115
Value forest products . . .	\$14,176
Value of small fruits . . .	54

POULTRY AND BEES.

Value of poultry on hand	\$ 4,431 00
Value of poultry raised in 1899	7,006 00
Dozens of eggs produced in 1899	53,300
Value of bees on hand	1,932 00
Pounds of honey produced in 1899	9,940
Pounds of wax produced in 1899	700

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 18,553 00
Animals slaughtered	19,163 00
Total	\$ 37,716 00

LIVE STOCK ON HAND.

Cattle	1,214	Horses	664
Sheep	2,675	Mules	855
Hogs	5,887	Asses and burros	25

LINCOLN COUNTY.

Population in 1900, 26,304; population in 1890, 27,382. This county has an area of 540 square miles. Its surface is diversified by numerous ridges and valleys. Elk River divides the county. Its soil, with few exceptions, is fertile. The forest growth, which is abundant, consists of black walnut, cherry, oak, locust, poplar, and tulip trees. The Nashville, Chattanooga and St. Louis Railway traverses the county. Millet is grown very extensively in this county. It is one of the Middle Division cotton counties, growing this staple in abundance; but the leading crops are corn, wheat, and grass. It is also a fine stock county.

Fayetteville, the county seat, is located on a branch of the Nashville, Chattanooga and St. Louis Railway. It has a good electric light plant, a first-class waterworks system, and good schools and churches. Its population in 1900 was 2,708.

The average assessed value of land in 1900 was \$9.58 per acre.

Number of manufacturing establishments in the county, 103; capital employed, \$268,148; amount of wages paid during the year, \$65,759; number of farms, 3,669; number of acres, 337,277; number of acres improved, 181,932; value of buildings, \$1,117,880; value of farming implements and machinery, \$284,140; value of live stock, \$1,094,049; value of products not fed to live stock, \$1,486,453; amount paid for farm labor during the year, \$62,700; total value of land and improvements, except buildings, \$4,280,520.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,459,840	Other cultivated grasses	1,969
Wheat	356,050	Grains cut green for hay	594
Oats	20,020	Other forage crops . . .	1,090
Other cereals	11,430	Sorghum cane sold . . .	477
Potatoes	4,397	Sorghum sirup (gallons)	23,605
Sweet potatoes	6,444	Cotton (bales)	2,304
Onions	1,361	Tobacco (pounds) . . .	4,240
Beans	62	Broom corn (pounds) . .	690
Peas	9,576	Dried fruits (pounds) . .	290
Value other vegetables .	\$37,967	Grapes (pounds)	27,721
Clover seed	44	Wine (gallons)	12
Other grass seed	1,528	Cider (barrels)	52
Peanuts	130	Vinegar (barrels)	36
Apples	56,773	NUMBER OF FRUIT TREES.	
Cherries	115	Apple	126,035
Peaches	768	Cherry	1,569
Pears	340	Peach	34,101
Plums and prunes	618	Pear	3,775
	TONS.	Plum and prune	4,108
Wild grasses	19	Grapevines	5,766
Millet	2,458	Value forest products .	\$42,782
Clover	324	Value of small fruits . .	541

POULTRY AND BEES.

Value of poultry on hand.....	\$ 47,521 00
Value of poultry raised in 1899.....	95,060 00
Dozens of eggs produced in 1899.....	574,480
Value of bees on hand.....	4,539 00
Pounds of honey produced in 1899.....	23,230
Pounds of wax produced in 1899.....	1,570

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$287,995 00
Animals slaughtered	132,757 00
Total	\$420,752 00

LIVE STOCK ON HAND.

Cattle	15,696	Horses	6,996
Sheep	10,152	Mules	5,971
Hogs	40,713	Asses and Burros	136

MACON COUNTY.

Population in 1900, 12,881; population in 1890, 10,878. This county borders on Kentucky, and has an area of 450 square miles. It is drained by affluents to the Cumberland River and the Big Barren River. Its surface is generally uneven and covered with forests. Its soil is fertile, and it is a good fruit district. The staple products are corn, cotton, tobacco, wheat, and pork. Coal has been discovered within $2\frac{1}{2}$ miles of the county seat. Lead ore has also been found in the county. There are indications of the presence of an abundant supply of coal oil. The timber consists of oak, chestnut, and poplar. Most of the timber is located on the Highland Rim. There is a plentiful supply of limestone and free-stone water, with hundreds of Silurian springs. It is one of the best gardening and truck-farming counties in the State. The county has not suffered from a drought in twenty years.

Lafayette, the county seat, is 30 miles northeast of Galatin. It has churches, schools, a weekly newspaper, several mercantile establishments, and a flour mill.

The average assessed value of land in 1900 was \$4.83 per acre.

Number of manufacturing establishments in the county, 39; capital employed, \$68,102; amount of wages paid during the year, \$22,857; number of farms, 2,132; number of acres, 176,130; number of acres improved, 78,384; value of buildings, \$368,670; value of farming implements and machinery, \$97,930; value of live stock, \$466,946; value of products not fed to live stock, \$590,000; amount paid for farm labor during the year, \$18,920; total value of land and improvements, except buildings, \$967,650.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	488,040	Other forage crops . . .	795
Wheat	46,940	Sorghum cane sold . . .	14
Oats	29,630		
Other cereals	123	Sorghum sirup (gallons)	36,039
Potatoes	9,047	Cotton (bales)	2
Sweet potatoes	19,205	Tobacco (pounds) . . .	610,850
Onions	941	Broom corn (pounds) . .	470
Beans	1,031	Dried fruits (pounds) . .	32,620
Peas	3,697	Grapes (pounds)	12,066
Value other vegetables .	\$26,958	Wine (gallons)	13
Grass seed	459	Cider (barrels)	217
Apples	71,983	Vinegar (barrels)	94
Cherries	72		
Peaches	208		
Pears	402		
Plums and prunes . . .	2,660		
	TONS.		
Wild grasses	58		
Millet	1,858		
Clover	917		
Other cultivated grasses	238		
Grains cut green for hay	1,064		

NUMBER OF FRUIT TREES.

Apple	126,564
Cherry	2,520
Peach	18,340
Pear	2,637
Plum and prune	16,144
Grapevines	3,643
Value forest products .	\$73,853
Value of small fruits .	258

POULTRY AND BEES.

Value of poultry on hand.....	\$ 19,650 00
Value of poultry raised in 1899.....	36,069 00
Dozens of eggs produced in 1899.....	268,460
Value of bees on hand.....	4,118 00
Pounds of honey produced in 1899.....	23,490
Pounds of wax produced in 1899.....	650

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 69,427 00
Animals slaughtered	85,277 00
Total	\$154,704 00

LIVE STOCK ON HAND.

Cattle	5,408	Horses	2,867
Sheep	5,930	Mules	2,309
Hogs	18,457	Asses and burros	83

MARSHALL COUNTY.

Population in 1900, 18,763; population in 1890, 18,906. This county has an area of 377 square miles. Duck River flows west through the county. The northern part of the county is generally level. What was once a fine belt of cedar timber is now partially covered with oak. The southern portion of the county is hilly, with creeks and valleys. The staple products are corn, oats, wheat, cattle, hogs, sheep, and fruits. A branch of the Nashville, Chattanooga and St. Louis Railway crosses this county. It is a good county for raising fine saddle stock. There is a fine belt of grindstone grit in the county about 9 miles long, which was utilized for making grindstones before the Civil War. This stone is found in vast quantities, and is said to be the best on the market. Improved lands can be bought for about \$16 per acre.

Lewisburg, the county seat, is located on the railroad. It has good schools, churches, an electric light plant, a pencil factory, a planing mill, two newspapers, two good hotels, and a flour mill. Its population in 1900 was 1,421.

The average assessed value of land in 1900 was \$10.14 per acre.

Number of manufacturing establishments in the county, 60; capital employed, \$160,605; amount of wages paid during the year, 67,253; number of farms, 2,703; number of acres, 229,482; number of acres improved, 136,927; value of buildings, \$1,031,030; value of farming implements and machinery, \$238,230; value of live stock, \$1,026,241; value of products not fed to live stock, \$1,100,756; amount paid for farm labor during the year, \$56,030; total value of land and improvements, except buildings, \$3,290,210.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS.
Corn	894,130	Grains cut green for hay	749
Wheat	258,120	Other forage crops . . .	1,559
Oats	45,640	Sorghum cane sold . . .	465
Other cereals	1,400	Sorghum sirup (gallons)	8,837
Potatoes	4,362	Cotton (bales)	85
Sweet potatoes	4,630	Tobacco (pounds) . . .	8,690
Onions	729	Broom corn (pounds) . .	1,150
Beans	61	Dried fruits (pounds) . .	10
Peas	4,528	Grapes (pounds)	15,329
Value other vegetables	\$41,895	Wine (gallons)	13
Grass seed	1,432	Cider (barrels)	41
Peanuts	121	Vinegar (barrels)	22
Apples	20,871		
Cherries	7		
Peaches	469		
Pears	43		
Plums and prunes	602		
	TONS.		
Wild grasses	16		
Millet	3,367		
Clover	377		
Other cultivated grasses	2,465		

NUMBER OF FRUIT TREES.

Apple	70,838
Cherry	1,346
Peach	29,369
Pear	1,694
Plum and prune	10,718
Grapevines	2,472
Value forest products	\$58,136
Value of small fruits . .	286

POULTRY AND BEES.

Value of poultry on hand.....	\$ 39,945 00
Value of poultry raised in 1899.....	81,025 00
Dozens of eggs produced in 1899.....	627,400
Value of bees on hand.....	3,567 00
Pounds of honey produced in 1899.....	20,320
Pounds of wax produced in 1899.....	950

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$257,949 00
Animals slaughtered	131,034 00
Total	\$388,983 00

LIVE STOCK ON HAND.

Cattle	13,184	Horses	7,364
Sheep	10,608	Mules	4,958
Hogs	28,316	Asses and burros	505

MAURY COUNTY.

Population in 1900, 42,703; population in 1890, 38,112. This county has an area of 596 square miles. Blue grass grows throughout the county, and Duck River almost equally divides it. It is traversed by the Louisville and Nashville Railroad and the Nashville, Chattanooga and St. Louis Railway. It is the fifth county in population in the State. The land is very fertile, and it is one of the richest agricultural counties in the State. Its dairy interests are first-class, and it is the central mule market of the South. It is also the center of the phosphate mining industry in the South.

Columbia, the county seat, is located on Duck River. It has an electric light plant, good waterworks system, fine public and private schools, ample banking facilities, first-class mercantile establishments, and a splendid United States Arsenal; it also has live, enterprising, and up-to-date newspapers. The town is 644 feet above sea level, and had a population in 1900 of 6,052.

Mount Pleasant, which is the center of the phosphate mining industry, has a population of 2,007 by the census of 1900. It has good schools, churches, fine mercantile establishments, banks, and a weekly newspaper.

The average assessed value of land in 1900 was \$17.79 per acre.

Number of manufacturing establishments in the county, 244; capital employed, \$776,844; amount of wages paid during the year, \$233,087; number of farms, 3,945; number of acres, 368,104; number of acres improved, 233,671; value of buildings, \$1,879,660; value of farming implements and machinery, \$425,830; value of live stock, \$1,633,806; value of products not fed to live stock, \$2,092,705; amount paid for farm labor during the year, \$152,890; total value of land and improvements, except buildings, \$7,886,920.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS.
Corn	1,577,460	Other cultivated grasses	1,829
Wheat	630,660	Grains cut green for hay	2,999
Oats	124,020	Other forage crops . . .	2,112
Other cereals	6,207	Sorghum cane sold . . .	743
Potatoes	56,479	Sorghum sirup (gallons)	39,760
Sweet potatoes	9,936	Cotton (bales)	174
Onions	773	Tobacco (pounds) . . .	12,960
Beans	122	Broom corn (pounds) . .	5,090
Peas	12,394	Dried fruits (pounds) . .	3,530
Value other vegetables	\$40,661	Grapes (pounds)	64,024
Clover seed	2	Wine (gallons)	355
Other grass seed	6,287	Cider (barrels)	74
Peanuts	50	Vinegar (barrels)	39
Apples	27,650		
Cherries	213	NUMBER OF FRUIT TREES.	
Peaches	1,767	Apple	101,156
Pears	917	Cherry	4,890
Plums and prunes	685	Peach	53,092
		Pear	11,075
		Plum and prune	9,944
		Grapevines	18,804
	TONS.	Value forest products	\$105,018
Wild grasses	16	Value of small fruits . .	2,323
Millet	1,757		
Clover	4,724		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 50,439 00
Value of poultry raised in 1899.....	97,561 00
Dozens of eggs produced in 1899.....	720,470
Value of bees on hand.....	4,843 00
Pounds of honey produced in 1899.....	33,550
Pounds of wax produced in 1899.....	1,340

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$517,389 00
Animals slaughtered	178,755 00
	<hr/>
Total	\$696,144 00

LIVE STOCK ON HAND.

Cattle	19,826	Horses	10,226
Sheep	13,214	Mules	7,984
Hogs	38,563	Asses and burros	516

MONTGOMERY COUNTY.

Population in 1900, 36,017; population in 1890, 29,697. This county borders on Kentucky, and has an area of 540 square miles. It is intersected by the Cumberland River and drained by Red River. Its surface is undulating and partly timbered with oak, chestnut, hickory, gum, poplar, and other varieties. It is one of the very best tobacco-growing counties in the State. Its soil is fertile. There are fine limestone and iron-ore deposits in the county. Its farms generally are in a fine state of cultivation. The staple products are corn, wheat, tobacco, oats, cattle, and pork. The county is traversed by the Louisville and Nashville Railroad and the Tennessee Central Railroad.

Clarksville, the county seat, is situated on the Cumberland River at the mouth of Red River, about 50 miles from Nashville, on the Louisville and Nashville Railroad and the Tennessee Central Railroad, the latter now under construction. It is an up-to-date, progressive city of 9,431 inhabitants, according to the census of 1900, and has one of the finest courthouses in the State. It has first-class hotels, good schools, beautiful churches, magnificent residences, gas works, an electric light plant, daily newspapers, good street car lines (electric), and is one of the largest tobacco markets in America.

The average assessed value of land in 1900 was \$8.79 per acre.

Number of manufacturing establishments in the county, 159; capital employed, \$1,543,014; amount of wages paid during the year, \$269,793; number of farms, 3,494; number of acres, 321,368; number of acres improved, 204,103; value of buildings, \$1,451,170; value of farming implements and machinery, \$248,750; value of live stock, \$982,888; value of products not fed to live stock, \$1,631,426; amount paid for farm labor during the year, \$148,230; total value of land and improvements, except buildings, \$3,781,660.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	915,240	Other forage crops . . .	610
Wheat	154,530	Sorghum cane sold . . .	309
Oats	50,370		
Other cereals	20	Sorghum sirup (gallons)	5,781
Potatoes	7,049	Tobacco (pounds) . . .	12,360,480
Sweet potatoes	18,520	Broom corn (pounds) . .	850
Onions	1,828	Dried fruits (pounds) . .	220
Beans	656	Grapes (pounds)	99,187
Peas	5,851	Wine (gallons)	84
Value other vegetables .	\$58,638	Cider (barrels)	93
Peanuts	43	Vinegar (barrels)	24
Apples	23,858		
Cherries	333		
Peaches	9,492		
Pears	5,811		
Plums and prunes	1,005		
	TONS.		
Wild grasses	69		
Millet	446		
Clover	2,886		
Other cultivated grasses	3,401		
Grains cut green for hay	679		

NUMBER OF FRUIT TREES.

Apple	80,728
Cherry	2,932
Peach	45,695
Pear	651
Plum and prune	5,660
Grapevines	6,519

Value forest products .	\$62,091
Value of small fruits . .	1,808

POULTRY AND BEES.

Value of poultry on hand.....	\$ 33,841 00
Value of poultry raised in 1899.....	60,744 00
Dozens of eggs produced in 1899.....	454,550
Value of bees on hand.....	4,106 00
Pounds of honey produced in 1899.....	21,860
Pounds of wax produced in 1899.....	1,120

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 77,338 00
Animals slaughtered	144,558 00
Total	\$221,896 00

LIVE STOCK ON HAND.

Cattle	11,110	Horses	4,399
Sheep	2,872	Mules	5,835
Hogs	32,250	Asses and burros	87

MOORE COUNTY.

Population in 1900, 5,706; population in 1890, 5,975. This county, called the "corn county of the State," is located in the Middle Division, and has an area of 170 square miles. It is bounded on the south by Elk River, is drained by many constantly flowing creeks, and has an abundance of good springs for domestic use. Its surface is hilly and partly covered with timber. Two of the largest sour-mash distilleries in the State are located in this county. **Its soil is fertile.** The staple products of the county are corn, oats, cattle, hogs, and sheep; it is also noted as a fine mule-producing county.

Lynchburg, the county seat, the second largest and best mule market in the State, is located about 64 miles from Nashville. It has good schools and churches and a weekly newspaper.

The average price of improved land is about \$10 per acre. There is a small amount of unimproved land in the eastern part of the county, near the Nashville, Chattanooga and St. Louis Railway, at about \$2 per acre.

The average assessed value of land in 1900 was \$8.01 per acre.

Number of manufacturing establishments in the county, 23; capital employed, \$106,219; amount of wages paid during the year, \$10,727; number of farms, 918; number of acres, 68,743; number of acres improved, 43,195; value of buildings, \$235,450; value of farming implements and machinery, \$69,460; value of live stock, \$294,049; value of products not fed to live stock, \$414,527; amount paid for farm labor during the year, \$13,710; total value of land and improvements, except buildings, \$897,300.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 13,631 00
Value of poultry raised in 1899.....	27,334 00
Dozens of eggs produced in 1899.....	182,580
Value of bees on hand.....	1,327 00
Pounds of honey produced in 1899.....	5,750
Pounds of wax produced in 1899.....	360

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 86,485 00
Animals slaughtered	37,641 00
	<hr/>
Total!	\$124,126 00

LIVE STOCK ON HAND.

Cattle	3,498	Horses	1,768
Sheep	1,787	Mules	1,372
Hogs	9,236	Asses and burros . . .	53

OVERTON COUNTY.

Population in 1900, 13,353; population in 1890, 12,039. This county is bounded on the north by the counties of Pickett and Clay, which border on Kentucky. It has an area of 376 square miles, and is drained by the East Fork and West Fork of Obed River. Its surface is hilly, and a great portion of its soil is fertile. There are fine grazing lands for cattle and sheep. The county is well supplied with fine forests of timber, oak, poplar, chestnut, and hickory. Coal is found in paying quantities.

Livingston, the county seat, has a population of 450, and is located 95 miles east of Nashville. It has four dry goods stores, two weekly newspapers, a drug store, a flouring mill, a sawmill, three churches, and good schools.

The average price of improved land is about \$8 per acre; unimproved land, from \$1 to \$5 per acre. The timber and coal lands furnish excellent opportunities for the investment of capital. Cheap lands, splendid water, and hospitable neighbors are the inducements offered to those looking for homes.

The average assessed value of land in 1900 was \$3.16 per acre.

Number of manufacturing establishments in the county, 55; capital employed, \$82,340; amount of wages paid during the year, \$16,477; number of farms, 2,214; number of acres, 235,615; number of acres improved, 99,414; value of buildings, \$318,960; value of farming implements and machinery, \$82,640; value of live stock, \$449,112; value of products not fed to live stock, \$574,420; amount paid for farm labor during the year, \$22,500; total value of land and improvements, except buildings, \$958,040.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 15,004	00
Value of poultry raised in 1899.....	32,973	00
Dozens of eggs produced in 1899.....	235,270	
Value of bees on hand.....	7,972	00
Pounds of honey produced in 1899.....	36,720	
Pounds of wax produced in 1899.....	1,070	

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 69,454 00
Animals slaughtered	82,077 00
	<hr/>
Total	\$151,531 00

LIVE STOCK ON HAND.

Cattle	7,452	Horses	2,761
Sheep	8,912	Mules	2,167
Hogs	18,950	Asses and burros	43

PERRY COUNTY.

Population in 1900, 8,800; population in 1890, 7,785. This county has an area of 420 square miles, is bounded on the west by the Tennessee River, and is drained by Buffalo River. Its surface is diversified by high ridges and rich valleys, and portions of it are well covered with forests of hickory, oak, walnut, ash, sycamore, and cypress. Its soil is very fertile. Peanuts grow to perfection in this locality. The staple products are corn, wheat, peanuts, buckwheat, and pork.

Linden, the county seat, is situated on Buffalo River, about 80 miles southwest of Nashville and 13 miles east of the Tennessee River. It has general stores, a weekly newspaper, churches, and good schools.

The average assessed value of land in 1900 was \$3.15 per acre.

Number of manufacturing establishments in the county, 37; capital employed, \$88,834; amount of wages paid during the year, \$15,170; number of farms, 1,319; number of acres, 194,481; number of acres improved, 45,055; value of buildings, \$275,340; value of farming implements and machinery, \$71,800; value of live stock, \$376,461; value of products not fed to live stock, \$532,720; amount paid for farm labor during the year, \$20,089; total value of land and improvements, except buildings, \$1,128,010.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	556,950	Grains cut green for hay . . .	1,149
Wheat	9,780	Other forage crops . . .	407
Oats	7,800	Sorghum cane sold . . .	41
Other cereals	180		
Potatoes	5,919	Sorghum sirup (gallons) . . .	15,139
Sweet potatoes	7,285	Cotton (bales)	116
Onions	481	Tobacco (pounds)	1,790
Beans	81	Broom corn (pounds) . . .	1,940
Peas	2,189	Dried fruits (pounds) . . .	610
Value other vegetables . . .	\$17,610	Grapes (pounds)	3,180
Clover seed	19	Cider (barrels)	22
Peanuts	232,137	Vinegar (barrels)	5
Apples	13,685		
Cherries	65		
Peaches	2		
Pears	76		
Plums and prunes	1,143		
	TONS.		
Wild grasses	5		
Millet	205		
Clover	336		
Other cultivated grasses . .	286		

NUMBER OF FRUIT TREES.

Apple	20,474
Cherry	286
Peach	22,781
Pear	1,253
Plum and prune	8,940
Grapevines	345
Value forest products . . .	\$45,055
Value of small fruits . . .	245

POULTRY AND BEES.

Value of poultry on hand	\$ 11,163 00
Value of poultry raised in 1899	14,903 00
Dozens of eggs produced in 1899	131,410
Value of bees on hand	4,602 00
Pounds of honey produced in 1899	17,540
Pounds of wax produced in 1899	1,150

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 50,512 00
Animals slaughtered	61,690 00
Total	\$112,202 00

LIVE STOCK ON HAND.

Cattle	4,722	Horses	1,147
Sheep	3,116	Mules	2,246
Hogs	17,925	Asses and burros	33

PICKETT COUNTY.

Population in 1900, 5,366; population in 1890, 4,736. This county has an area of 240 square miles. It is bounded as follows: On the north, by the State of Kentucky; on the south, by Overton and Fentress Counties; on the east, by Scott County; on the west, by Clay County. Its surface is hilly, and it is well watered by Obed and Wolf Rivers. In many localities the county is well covered with a fine growth of timber. The staple products are corn, wheat, oats, grass, cattle, and hogs.

Byrdstown, the county seat, has good schools, churches, and general stores.

The average assessed value of land in 1900 was \$3.51 per acre.

Number of manufacturing establishments in the county, 15; capital employed, \$15,910; amount of wages paid during the year, \$2,090; number of farms, 926; number of acres, 88,025; number of acres improved, 37,680; value of buildings, \$115,830; value of farming implements and machinery, \$32,870; value of live stock, \$179,137; value of products not fed to live stock, \$246,547; amount paid for farm labor during the year, \$9,540; total value of land and improvements, except buildings, \$322,390.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 5,686 00
Value of poultry raised in 1899.....	13,169 00
Dozens of eggs produced in 1899.....	93,580
Value of bees on hand.....	3,156 00
Pounds of honey produced in 1899.....	16,220
Pounds of wax produced in 1899.....	470

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 28,481 00
Animals slaughtered	32,088 00
	<hr/>
Total	\$ 60,569 00

LIVE STOCK ON HAND.

Cattle	3,107	Horses	958
Sheep	2,950	Mules	817
Hogs	7,321	Asses and burros	13

PUTNAM COUNTY.

Population in 1900, 16,890; population in 1890, 13,683. This county has an area of 430 square miles, with the Cumberland River touching its northwestern border. Its surface is undulating and partially covered with forests of chestnut, hickory, oak, walnut, and poplar growth. The soil is moderately fertile, and the county is well adapted to stock raising. Corn, grass, cattle, and hogs are the staple products. Fine coal deposits are found here. The Tennessee Central Railroad intersects the county, and there are flourishing lumber mills located along this road.

Cookeville, the county seat, is situated on the Tennessee Central Railroad. It has churches, schools, general stores, national banks, lumber mills, weekly newspapers, and fair grounds. Its population in 1900 was 1,800.

The average assessed value of land in 1900 was \$4.75 per acre.

Number of manufacturing establishments in the county, 66; capital employed, \$284,489; amount of wages paid during the year, \$66,405; number of farms, 2,616; number of acres, 209,388; number of acres improved, 93,015; value of buildings, \$414,950; value of farming implements and machinery, \$122,280; value of live stock, \$554,501; value of products not fed to live stock, \$749,072; amount paid for farm labor during the year, \$18,950; total value of land and improvements, except buildings, \$1,064,030.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	674,210	Grains cut green for hay	1,567
Wheat	51,240	Other forage crops . . .	788
Oats	39,490		
Other cereals	880	Sorghum sirup (gallons)	22,789
Potatoes	22,030	Cotton (bales)	5
Sweet potatoes	24,406	Tobacco (pounds)	37,200
Onions	807	Broom corn (pounds) .	160
Beans	242	Dried fruits (pounds) .	181,160
Peas	6,694	Grapes (pounds)	16,806
Value other vegetables .	\$49,108	Wine (gallons)	45
Peanuts	21	Cider (barrels)	75
Apples	227,397	Vinegar (barrels)	45
Cherries	174		
Peaches	177		
Pears	33		
Plums and prunes . . .	807		
	TONS.		
Wild grasses	21		
Millet	1,469		
Clover	268		
Other cultivated grasses	825		

NUMBER OF FRUIT TREES.

Apple	151,298
Cherry	1,507
Peach	17,171
Pear	795
Plum and prune	5,598
Grapevines	1,621
Value forest products .	\$60,690
Value of small fruits . .	161

POULTRY AND BEES.

Value of poultry on hand.....	\$ 22,488 00
Value of poultry raised in 1899.....	53,820 00
Dozens of eggs produced in 1899.....	348,540
Value of bees on hand.....	6,809 00
Pounds of honey produced in 1899.	31,900
Pounds of wax produced in 1899.....	1,430

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$126,323 00
Animals slaughtered	98,235 00
Total	\$224,558 00

LIVE STOCK ON HAND.

Cattle	7,812	Horses	3,474
Sheep	7,010	Mules	2,346
Hogs	22,371	Asses and burros	67

ROBERTSON COUNTY.

Population in 1900, 25,029; population in 1890, 20,078. This county borders on Kentucky, and has an area of about 536 square miles. Its surface is hilly and well covered with forests. Its soil is partly fertile. Corn, wheat, tobacco, cattle, and hogs are the staple products. Fertilizers are very largely used in this county. It is one of the largest tobacco counties in the South, and none surpasses it in the quality of its tobacco. It is also a large producer of whisky. The Louisville and Nashville Railroad traverses the county.

Springfield, the county seat, is situated on the Louisville and Nashville Railroad, about 30 miles north of Nashville. It is well located; has fine schools, churches, and general stores; and is one of the largest tobacco markets in the State. It also has two banks and three weekly newspapers. Its population in 1900 was 1,732.

The average assessed value of land in 1900 was \$9.65 per acre.

Number of manufacturing establishments in the county, 67; capital employed, \$392,057; amount of wages paid during the year, \$58,662; number of farms, 3,290; number of acres, 278,608; number of acres improved, 196,142; value of buildings, \$1,443,260; value of farming implements and machinery, \$333,620; value of live stock, \$847,754; value of products not fed to live stock, \$1,646,505; amount paid for farm labor during the year, \$116,760; total value of land and improvements, except buildings, \$3,877,860.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	770,110	Grains cut green for hay	2,583
Wheat	333,550	Other forage crops . . .	2,269
Oats	34,500	Sorghum cane sold . . .	91
Other cereals	320		
Potatoes	5,646	Sorghum sirup (gallons)	2,639
Sweet potatoes	8,375	Tobacco (pounds) . . .	10,431,470
Onions	1,009	Broom corn (pounds) . .	320
Beans	77	Dried fruits (pounds) . .	490
Peas	810	Grapes (pounds)	66,300
Value other vegetables .	\$54,470	Wine (gallons)	282
Clover seed	2	Cider (barrels)	287
Peanuts	1	Vinegar (barrels)	67
Apples	39,129		
Cherries	165		
Peaches	50		
Pears	391		
Plums and prunes . . .	411		
	TONS.		
Wild grasses	1		
Millet	155		
Clover	3,071		
Other cultivated grasses	1,508		

NUMBER OF FRUIT TREES.

Apple	98,855
Cherry	4,209
Peach	32,651
Pear	2,663
Plum and prune	7,901
Grapevines	11,926

Value forest products .	\$36,761
Value of small fruits . .	608

POULTRY AND BEES.

Value of poultry on hand.....	\$ 31,708 00
Value of poultry raised in 1899.....	59,224 00
Dozens of eggs produced in 1899.....	314,210
Value of bees on hand.....	4,062 00
Pounds of honey produced in 1899.....	19,560
Pounds of wax produced in 1899.....	1,060

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 67,002 00
Animals slaughtered	150,433 00
Total	<u>\$217,435 00</u>

LIVE STOCK ON HAND.

Cattle	7,959	Horses	4,761
Sheep	2,413	Mules	4,631
Hogs	27,767	Asses and burros	85

RUTHERFORD COUNTY.

Population, in 1900, 33,543; population in 1890, 35,097. This county has an area of 580 square miles. It is watered east and west by forks of Stone's River. There is considerable timber in the county, consisting of oak, poplar, hickory, sugar tree, linden, beech, buckeye, sycamore, black and yellow locust, papaw, box elder, black gum and sweet gum. The average price of improved land ranges from \$20 to \$30 per acre; unimproved land, from \$10 to \$20. There are fine opportunities in timber in the county, and the prospects for oil are flattering. The lands in the county are cheap. The soil is remarkably well adapted to diversification. The staple products are corn, cotton, wheat, sorghum, peas, clover, and grasses. The live-stock interests of the county are considerable. Fine horses, cattle, sheep, and hogs are abundant in the county.

Murfreesboro, the county seat, is a flourishing city of about 4,000 population. It has splendid churches, good schools, prosperous business houses and banks, enterprising newspapers, and considerable manufacturing interests. The celebrated battle of Stone's River was fought near Murfreesboro. In a three-days' engagement 25,000 soldiers were killed, wounded, or missing. Efforts are being made to have Congress establish a battlefield park at this point.

The average assessed value of land in 1900 was \$4.41 per acre.

Number of manufacturing establishments in the county, 94; capital employed, \$395,257; amount of wages paid during the year, \$64,577; number of farms, 4,335; number of acres, 361,299; number of acres improved, 214,949; value of buildings, \$1,700,060; value of farming implements and machinery, \$370,830; value of live stock, \$1,458,283; value of products not fed to live stock, \$1,-

796,662; amount paid for farm labor during the year, \$88,070; total value of land and improvements, except buildings, \$5,360,270.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,465,300	Other cultivated grasses	1,517
Wheat	269,510	Grains cut green for hay	4,603
Oats	59,940	Other forage crops . . .	3,942
Other cereals	2,420	Sorghum cane sold . . .	997
Potatoes	9,678	Sorghum sirup (gallons)	83,336
Sweet potatoes	16,435	Cotton (bales)	4,102
Onions	2,272	Tobacco (pounds) . . .	28,040
Beans	423	Broom corn (pounds) . .	11,540
Peas	16,109	Dried fruits (pounds) . .	3,060
Value other vegetables	\$58,618	Grapes (pounds)	89,155
Clover seed	5	Wine (gallons)	25
Other grass seed	2,812	Cider (barrels)	83
Peanuts	59	Vinegar (barrels)	32
Apples	30,623		
Cherries	398	NUMBER OF FRUIT TREES.	
Peaches	301	Apple	95,572
Pears	1,173	Cherry	5,840
Plums and prunes	1,429	Peach	69,813
		Pear	6,222
		Plum and prune	13,137
		Grapevines	12,418
Wild grasses	13	Value forest products	\$126,450
Millet	3,460	Value of small fruits . .	1,679
Clover	2,092		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 50,078 00
Value of poultry raised in 1899.....	84,098 00
Dozens of eggs produced in 1899.....	804,630
Value of bees on hand.....	4,687 00
Pounds of honey produced in 1899.....	24,330
Pounds of wax produced in 1899.....	740

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$328,208 00
Animals slaughtered	177,349 00
Total	\$505,557 00

LIVE STOCK ON HAND.

Cattle	20,393	Horses	10,749
Sheep	13,941	Mules	7,006
Hogs	38,365	Asses and burros	642

SMITH COUNTY.

Population in 1900, 19,026; population in 1890, 18,404. This county, the largest tobacco-growing county of Middle Tennessee, has an area of 368 square miles. It is intersected by the Cumberland River and drained by the Caney Fork River. Its surface is hilly and well covered with forests of oak, ash, chestnut, hickory, walnut, and poplar. The county is traversed by the Tennessee Central Railroad. It furnishes good grazing for cattle and sheep. The staple products are corn, wheat, oats, tobacco, cattle, sheep, and hogs.

Carthage, the county seat, is situated on the right bank of the Cumberland River, at the mouth of the Caney Fork River, at the terminus of the Carthage branch of the Tennessee Central Railroad, and is 50 miles northeast of Nashville. Large shipments of tobacco are made from this point by steamboat by way of the Cumberland River. The town has churches, schools, general stores, a national bank, and a weekly newspaper. Its population is 940.

The average assessed value of land in 1900 was \$12.91 per acre.

Number of manufacturing establishments in the county, 46; capital employed, \$102,558; amount of wages paid during the year, \$34,565; number of farms, 2,665; number of acres, 203,870; number of acres improved, 115,240; value of buildings, \$859,750; value of farming implements and machinery, \$167,190; value of live stock, \$981,803; value of products not fed to live stock, \$1,133,523; amount paid for farm labor during the year, \$46,280; total value of land and improvements, except buildings, \$2,866,900.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,166,370	Grains cut green for hay	2,350
Wheat	164,830	Other forage crops . . .	1,724
Oats	32,250	Sorghum cane sold . . .	630
Other cereals	1,700		
Potatoes	7,496	Sorghum sirup (gallons)	41,367
Sweet potatoes	15,669	Tobacco (pounds) . . .	1,187,070
Onions	1,054	Broom corn (pounds) .	19,170
Beans	102	Dried fruits (pounds) .	15,110
Peas	6,419	Grapes (pounds)	12,586
Value other vegetables .	\$37,180	Wine (gallons)	11
Clover seed	28	Cider (barrels)	98
Other grass seed	151	Vinegar (barrels)	68
Apples	69,734		
Cherries	61		
Peaches	196		
Pears	240		
Plums and prunes	1,231		
	TONS.		
Wild grasses	29		
Millet	2,682		
Clover	2,297		
Other cultivated grasses	2,148		

NUMBER OF FRUIT TREES.

Apple	97,559
Cherry	2,611
Peach	14,487
Pear	3,227
Plum and prune	7,043
Grapevines	1,409

Value forest products .	\$60,894
Value of small fruits . .	338

POULTRY AND BEES.

Value of poultry on hand.....	\$ 39,926 00
Value of poultry raised in 1899.....	73,745 00
Dozens of eggs produced in 1899.....	534,090
Value of bees on hand.....	6,529 00
Pounds of honey produced in 1899.....	25,930
Pounds of wax produced in 1899.....	1,040

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$216,114 00
Animals slaughtered	109,524 00
Total	\$325,638 00

LIVE STOCK ON HAND.

Cattle	12,451	Horses	5,996
Sheep	13,572	Mules	4,428
Hogs	31,754	Asses and burros	194

STEWART COUNTY.

Population in 1900, 15,224; population in 1890, 12,193. This county borders on Kentucky, and has an area of 500 square miles. The Cumberland River intersects it, and the Tennessee River flows along its western border. The surface is hilly and covered in many localities with forests of hickory, oak, ash, and other varieties of timber. The soil is comparatively fertile. The staple products are corn, tobacco, wheat, oats, and pork. Iron ore is found in paying quantities here. It is a good section for the production of export tobacco. There are several iron furnaces located in the county, which is intersected by the Louisville and Nashville Railroad.

Dover, the county seat, is situated on the left bank of the Cumberland River, 63 miles northwest of Nashville. The battlefield of Fort Donelson is located near the town. It has schools, churches, a weekly newspaper, and general stores. Its population in 1900 was 400.

The average assessed value of land in 1900 was \$3.91 per acre.

Number of manufacturing establishments in the county, 19; capital employed, \$202,030; amount of wages paid during the year, \$31,349; number of farms, 1,900; number of acres, 197,694; number of acres improved, 83,199; value of buildings, \$453,310; value of farming implements and machinery, \$125,480; value of live stock, \$574,465; value of products not fed to live stock, \$757,206; amount paid for farm labor during the year, \$36,170; total value of land and improvements, except buildings, \$1,046,500.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	720,780	Grains cut green for hay	915
Wheat	40,460	Other forage crops . . .	167
Oats	6,030	Sorghum cane sold . . .	53
Potatoes	6,768	Sorghum sirup (gallons)	8,118
Sweet potatoes	9,234	Tobacco (pounds) . . .	2,738,060
Onions	444	Dried fruits (pounds) .	1,770
Beans	112	Grapes (pounds)	10,019
Peas	830	Cider (barrels)	145
Value other vegetables .	\$22,026	Vinegar (barrels)	45
Peanuts	23		
Apples	17,305		
Cherries	80		
Peaches	514		
Pears	313		
Plums and prunes . . .	1,656		
	TONS.		
Wild grasses	44		
Miliet	593		
Clover	1,037		
Other cultivated grasses	1,847		

NUMBER OF FRUIT TREES.

Apple	32,850
Cherry	808
Peach	20,674
Pear	1,168
Plum and prune	7,774
Grapevines	894
Value forest products .	\$70,286
Value of small fruits . .	119

POULTRY AND BEES.

Value of poultry on hand.....	\$ 20,856 00
Value of poultry raised in 1899.....	32,151 00
Dozens of eggs produced in 1899.....	332,150
Value of bees on hand.....	2,776 00
Pounds of honey produced in 1899.....	12,900
Pounds of wax produced in 1899.....	1,000

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 84,078 00
Animals slaughtered	102,891 00
Total	\$186,969 00

LIVE STOCK ON HAND.

Cattle	7,510	Horses	2,263
Sheep	4,056	Mules	3,506
Hogs	23,360	Asses and burros	70

SUMNER COUNTY.

Population in 1900, 26,072; population in 1890, 23,668. This county has an area of 536 square miles. It is one of the finest stock-raising and agricultural counties in the State. The Louisville and Nashville Railroad and the Chesapeake and Nashville Railroad traverse the county. The county borders on Kentucky, and is bounded on the south by the Cumberland River. It is a splendid county for fruit growing. Many portions of it are well timbered with oak, poplar, hickory, gum, sycamore, ash, chestnut, and elm. There are large deposits of brown phosphate rock and numerous sulphur wells throughout the county. The county is well supplied with first-class turnpikes. The average price of improved land ranges from \$2 to \$50 per acre. There are indications of the presence of coal oil in paying quantities.

Gallatin, the county seat, is situated 26 miles northeast of Nashville. It has first-class schools, good churches, two weekly newspapers and one semiweekly, a number of manufacturing establishments, a fine waterworks system, an electric light plant, flourishing banks, and mercantile establishments. There are macadamized turnpikes leading to the town. It is a fine poultry market. The population of the town in 1900 was 2,409.

The average assessed value of land in 1900 was \$8.80 per acre.

Number of manufacturing establishments in the county, 78; capital employed, \$217,405; amount of wages paid during the year, \$57,806; number of farms, 3,280; number of acres, 312,740; number of acres improved, 187,509; value of buildings, \$1,529,930; value of farming implements and machinery, \$290,570; value of live stock, \$1,251,684; value of products not fed to live stock, \$1,316,486; amount paid for farm labor during the year, \$90,200; total value of land and improvements, except buildings, \$4,179,030.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,036,810	Grains cut green for hay . . .	3,584
Wheat	251,590	Other forage crops . . .	2,169
Oats	47,480	Sorghum cane sold . . .	4,545
Other cereals	1,380		
Potatoes	34,550	Sorghum sirup (gallons) . . .	25,127
Sweet potatoes	12,345	Tobacco (pounds) . . .	569,140
Onions	3,079	Broom corn (pounds) . . .	158,160
Beans	199	Dried fruits (pounds) . . .	20,700
Peas	11,006	Grapes (pounds) . . .	89,874
Value other vegetables . . .	\$42,929	Wine (gallons) . . .	1,009
Grass seed	200	Cider (barrels) . . .	417
Peanuts	38	Vinegar (barrels) . . .	124
Apples	83,279		
Cherries	586		
Peaches	885		
Pears	1,105		
Plums and prunes . . .	1,145		
	TONS.		
Wild grasses	41		
Millet	2,039		
Clover	1,495		
Other cultivated grasses . .	4,665		

NUMBER OF FRUIT TREES.

Apple	179,637
Cherry	3,654
Peach	29,343
Pear	4,750
Plum and prune	6,165
Grapevines	13,551
Value forest products . . .	\$62,882
Value of small fruits . . .	2,910

POULTRY AND BEES.

Value of poultry on hand	\$ 41,166 00
Value of poultry raised in 1899	69,495 00
Dozens of eggs produced in 1899	597,310
Value of bees on hand	5,098 00
Pounds of honey produced in 1899	31,750
Pounds of wax produced in 1899	1,050

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$280,809 00
Animals slaughtered	141,912 00
Total	\$422,721 00

LIVE STOCK ON HAND.

Cattle	15,429	Horses	8,718
Sheep	12,581	Mules	4,454
Hogs	29,849	Asses and burros	259

TROUSDALE COUNTY.

Population in 1900, 6,004; population in 1890, 5,850. This county has an area of 166 square miles, and is bounded on the south by the Cumberland River. Its surface is hilly, with rich valleys. The price of improved land is about \$30 per acre, and plenty of unimproved land can be bought at from \$25 to \$35 per acre. The farms are generally in good condition, and both farms and homes are kept in excellent order. It is a splendid stock-raising county. Wheat, corn, oats, fruit, hay, tobacco, and pork are the staple products of the county.

Hartsville, the county seat, is situated on the north bank of the Cumberland River and on the Chesapeake and Nashville railroad. It has good churches, schools, and general stores.

The average assessed value of land in 1900 was \$11.08 per acre.

Number of manufacturing establishments in the county, 17; capital employed, \$59,600; amount of wages paid during the year, \$10,645; number of farms, 810; number of acres, 71,457; **number of acres improved, 42,431**; value of buildings, \$307,850; value of farming implements and machinery, \$54,990; value of live stock, \$329,209; value of products not fed to live stock, \$318,879; amount paid for farm labor during the year, \$13,630; total value of land and improvements, except buildings, \$830,670.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	330,550	Other forage crops . . .	618
Wheat	53,390	Sorghum cane sold . . .	169
Oats	9,080		
Other cereals	110	Sorghum sirup (gallons)	4,339
Potatoes	2,910	Tobacco (pounds) . . .	249,480
Sweet potatoes	2,677	Broom corn (pounds) .	30,810
Onions	128	Dried fruits (pounds) .	560
Beans	83	Grapes (pounds)	300
Peas	8,506	Wine (gallons)	22
Value other vegetables .	\$14,467	Cider (barrels)	46
Grass seed	163	Vinegar (barrels)	20
Peanuts	83		
Apples	8,561		
Cherries	21		
Peaches	63		
Pears	273		
Plums and prunes . . .	238		
	TONS.		
Millet	514		
Clover	292		
Other cultivated grasses	777		
Grains cut green for hay	1,221		

NUMBER OF FRUIT TREES.

Apple	18,816
Cherry	484
Peach	6,931
Pear	676
Plum and prune	1,695
Grapevines	59

Value forest products .	\$14,329
Value of small fruits . .	58

POULTRY AND BEES.

Value of poultry on hand.....	\$ 8,228 00
Value of poultry raised in 1899.....	1,509 00
Dozens of eggs produced in 1899.....	140,440
Value of bees on hand.....	1,167 00
Pounds of honey produced in 1899.....	7,990
Pounds of wax produced in 1899.....	190

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 84,645 00
Animals slaughtered	34,938 00
Total	\$119,583 00

LIVE STOCK ON HAND.

Cattle	4,667	Horses	2,147
Sheep	2,826	Mules	1,470
Hogs	9,420	Asses and burros	53

WARREN COUNTY.

Population in 1900, 16,410; population in 1890, 14,413. This county has an area of 440 square miles, and is intersected by the Caney Fork and Rock Rivers. Its surface is hilly, and the valleys are very fertile. It is a splendid fruit-growing county, apples growing to perfection here. The forests are of ash, oak, hickory, poplar, and maple. Hogs, cattle, oats, wheat, and corn are the staple products. The Nashville, Chattanooga and St. Louis Railway runs through the county.

McMinnville, the county seat, is located on the railroad. It has churches, good schools, an electric light plant, a national bank, weekly newspapers, flour mills, a sawmill, and a number of prosperous mercantile establishments. Its population in 1900 was 1,980.

The average assessed value of land in 1900 was \$5.34 per acre.

Number of manufacturing establishments in the county, 82; capital employed, \$364,485; amount of wages paid during the year, \$100,835; number of farms, 2,301; number of acres, 233,466; number of acres improved, 122,426; value of buildings, \$711,460; value of farming implements and machinery, \$214,270; value of live stock, \$578,929; value of products not fed to live stock, \$967,922; amount paid for farm labor during the year, \$39,710; total value of land and improvements, except buildings, \$1,790,540.

WAYNE COUNTY.

Population in 1900, 12,936; population in 1890, 11,471. This county borders on Alabama, and has an area of about 720 square miles. It is drained by Buffalo, Beech, and Cypress Creeks. Its surface is generally hilly. It is a splendid fruit-growing county. The forest growth is of hickory, ash, oak, poplar, maple, pine, and tulip. There is considerable timber in the county. Limestone and iron ore are found in paying quantities. Freestone springs are numerous. The staple products are cotton, corn, wheat, cattle, and pork.

Waynesboro, the county seat, is about 90 miles southwest of Nashville. It has good schools, churches, a weekly newspaper, and a number of mercantile establishments.

The average assessed value of land in 1900 was \$2.25 per acre.

Number of manufacturing establishments in the county, 56; capital employed, \$1,747,681; amount of wages paid during the year, \$167,287; number of farms, 1,717; number of acres, 234,708; number of acres improved, 62,488; value of buildings, \$282,520; value of farming implements and machinery, \$84,550; value of live stock, \$445,216; value of products not fed to live stock, \$495,152; amount paid for farm labor during the year, \$23,260; total value of land and improvements, except buildings, \$984,250.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHEL'S.		TONS.
Corn	543,080	Grains cut green for hay . . .	514
Wheat	28,230	Other forage crops . . .	1,030
Oats	8,320	Sorghum cane sold . . .	10
Other cereals	1,025	Sorghum sirup (gallons) . . .	19,797
Potatoes	4,059	Cotton (bales)	201
Sweet potatoes	6,789	Tobacco (pounds)	2,586
Onions	801	Broom corn (pounds) . . .	710
Beans	320	Dried fruits (pounds) . . .	19,160
Peas	8,604	Grapes (pounds)	11,733
Value other vegetables . . .	\$17,494	Cider (barrels)	18
Peanuts	9,788	Vinegar (barrels)	9
Apples	44,091		
Cherries	1		
Peaches	43		
Pears	230		
Plums and prunes	886		
	TONS.		
Wild grasses	10		
Millet	334		
Clover	619		
Other cultivated grasses . . .	404		

NUMBER OF FRUIT TREES.

Apple	47,034
Cherry	308
Peach	33,335
Pear	1,668
Plum and prune	10,290
Grapevines	898
Value forest products . . .	\$61,959
Value of small fruits . . .	90

POULTRY AND BEES.

Value of poultry on hand	\$ 11,866 00
Value of poultry raised in 1899	24,785 00
Dozens of eggs produced in 1899	150,640
Value of bees on hand	6,337 00
Pounds of honey produced in 1899	24,390
Pounds of wax produced in 1899	2,000

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 77,409 00
Animals slaughtered	61,081 00
Total	\$138,490 00

LIVE STOCK ON HAND.

Cattle	7,320	Horses	2,049
Sheep	4,680	Mules	2,687
Hogs	18,283	Asses and burros	111

WHITE COUNTY.

Population in 1900, 14,157; population in 1890, 12,384. This county has an area of 390 square miles, and is drained by the Caney Fork River, Falling Water Creek, and Calf Killer Creek. The surface is uneven and is extensively covered with forests of ash, hickory, maple, beech, cherry, oak, and walnut. The soil is fertile. The staple products are corn, wheat, oats, cattle, and hogs. The Bon Air Coal Mines are located in this county, and are among the best in the State. The Nashville, Chattanooga and St. Louis Railway traverses the county. The average price of improved land is about \$15 per acre; there is plenty of unimproved land in the county for sale from about \$5 to \$10 per acre. The supply of timber and the excellent water power offer inducements for the investment of capital in sawmills, stave and handle factories, and other wood-working establishments.

Sparta, the county seat, is located on a branch of the Nashville, Chattanooga and St. Louis Railway, about 3 miles from the Cumberland Mountain. Fine coal mines are operated near the town. It has churches, schools, two weekly newspapers, a national bank, and a number of flourishing mercantile establishments. Its population in 1900 was 895.

The average assessed value of land in 1900 was \$4.38 per acre.

Number of manufacturing establishments in the county, 43; capital employed, \$226,019; amount of wages paid during the year, \$39,738; number of farms, 1,794; number of acres, 182,104; number of acres improved, 97,324; value of buildings, \$410,990; value of farming implements and machinery, \$119,310; value of live stock, \$478,787; value of products not fed to live stock, \$601,804; amount paid for farm labor during the year, \$24,730; total value of land and improvements, except buildings, \$1,248,310.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS.
Corn	508,690	Other cultivated grasses	655
Wheat	74,050	Grains cut green for hay	2,356
Oats	22,840	Other forage crops . . .	2,000
Other cereals	400	Cotton (bales)	7
Potatoes	8,107	Tobacco (pounds) . . .	33,820
Sweet potatoes	12,435	Broom corn (pounds) . .	2,480
Onions	652	Dried fruits (pounds) . .	137,660
Beans	605	Grapes (pounds)	73,504
Peas	5,376	Wine (gallons)	218
Value other vegetables	\$27,137	Cider (barrels)	90
Grass seed	387	Vinegar (barrels)	52
Peanuts	70		
Apples	139,042	NUMBER OF FRUIT TREES.	
Cherries	54	Apple	129,447
Peaches	378	Cherry	1,906
Pears	125	Peach	25,211
Plums and prunes . . .	886	Pear	1,191
	TONS.	Plum and prune	6,595
Wild grasses	88	Grapevines	7,312
Millet	730	Value forest products . .	\$50,201
Clover	268	Value of small fruits . .	892

POULTRY AND BEES.

Value of poultry on hand.....	\$ 15,262 00
Value of poultry raised in 1899.....	33,113 00
Dozens of eggs produced in 1899.....	235,150
Value of bees on hand.....	7,646 00
Pounds of honey produced in 1899.....	46,250
Pounds of wax produced in 1899.....	790

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$102,744 00
Animals slaughtered	65,643 00
Total	\$168,387 00

LIVE STOCK ON HAND.

Cattle	8,603	Horses	3,443
Sheep	5,096	Mules	1,806
Hogs	18,682	Asses and burros	70

WILLIAMSON COUNTY.

Population in 1900, 26,429; population in 1890, 26,321. This county has an area of 550 square miles, and is drained by Harpeth River. Its surface is hilly, and the soil is very fertile. It has a fine growth of timber, comprising ash, oak, hickory, maple, poplar, beech, and walnut. Wheat, corn, oats, cotton, cattle, sheep, and hogs are the staple products.

Franklin, the county seat, is situated on the Louisville and Nashville Railroad and Harpeth River. It is a progressive city, and has fine churches, good schools (both public and private), two newspapers, two national banks, several manufacturing establishments, and numerous warehouses. The bloody battle of Franklin was fought near this place on November 30, 1864. The population of the town in 1900 was 2,180.

The average assessed value of land in 1900 was \$11.94 per acre.

Number of manufacturing establishments in the county, 83; capital employed, \$269,494; amount of wages paid during the year, \$41,272; number of farms, 3,152; number of acres, 340,886; number of acres improved, 182,179; value of buildings, \$1,610,980; value of farming implements and machinery, \$345,200; value of live stock, \$1,234,082; value of products not fed to live stock, \$1,646,293; amount paid for farm labor during the year, \$155,590; total value of land and improvements, except buildings, \$6,046,420.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 38,112 00
Value of poultry raised in 1899.....	65,980 00
Dozens of eggs produced in 1899.....	536,380
Value of bees on hand.....	4,251 00
Pounds of honey produced in 1899.....	25,050
Pounds of wax produced in 1899.....	810

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$207,372	00
Animals slaughtered	157,932	00
Total	\$365,304	00

LIVE STOCK ON HAND.

Cattle	15,451	Horses	8,200
Sheep	11,222	Mules	6,153
Hogs	30,390	Asses and burros	299

WILSON COUNTY.

Population in 1900, 27,078; population in 1890, 27,148. This county has an area of 536 square miles, and is bounded on the north by the Cumberland River. It is one of the few counties that have cedar timber left in them. The soil is very fertile in many parts of the county, and blue grass grows spontaneously throughout the county. It is one of the best stock-producing counties in the State, and has a considerable supply of ash and cedar timber. The staple products are corn, wheat, oats, hay, tobacco, cattle, hogs, butter, and pork. The county is traversed by the Nashville, Chattanooga and St. Louis Railway and the Tennessee Central Railroad.

Lebanon, the county seat, is situated at the eastern terminus of the Lebanon branch of the Nashville, Chattanooga and St. Louis Railway and on the Tennessee Central Railroad. Cumberland University, one of the leading educational institutions of the South, is situated at this place. It also has a splendid seminary for the education of young ladies and one of the finest training schools for boys in the South. The schools (both public and private) are first-class. It has two newspapers, numerous business houses, national banks, manufacturing establishments, and a first-class electric light plant.

The average assessed value of land in 1900 was \$11.43 per acre.

Number of manufacturing establishments in the county, 93; capital employed, \$135,611; amount of wages paid during the year, \$31,997; number of farms, 3,880; number of acres, 364,731; number of acres improved, 202,990; value of buildings, \$1,577,260; value of farming implements and machinery, \$323,140; value of live stock, \$1,598,047; value of products not fed to live stock, \$1,776,404; amount paid for farm labor during the year, \$83,090; total value of land and improvements, except buildings, \$4,851,850.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,353,820	Other cultivated grasses	4,581
Wheat	273,120	Grains cut green for hay	4,003
Oats	61,940	Other forage crops . . .	6,374
Other cereals	3,405	Sorghum cane sold . . .	613
Potatoes	15,284	Sorghum sirup (gallons)	41,648
Sweet potatoes	25,783	Cotton (bales)	5
Onions	1,549	Tobacco (pounds) . . .	13,380
Beans	126	Broom corn (pounds) . .	3,770
Peas	19,330	Dried fruits (pounds) . .	4,750
Value other vegetables	\$63,167	Grapes (pounds)	42,251
Clover seed	69	Wine (gallons)	507
Other grass seed	1,581	Cider (barrels)	196
Peanuts	18	Vinegar (barrels)	120
Apples	86,652		
Cherries	1,350	NUMBER OF FRUIT TREES.	
Peaches	9,948	Apple	195,085
Pears	6,323	Cherry	4,712
Plums and prunes	4,806	Peach	36,398
		Pear	10,482
		Plum and prune	11,886
	TONS.	Grapevines	7,299
Wild grasses	189	Value forest products	\$116,124
Millet	4,173	Value of small fruits . .	2,692
Clover	3,205		

POULTRY AND BEES.

Value of poultry on hand.....	\$	55,568	00
Value of poultry raised in 1899.....		101,355	00
Dozens of eggs produced in 1899.....		1,115,530	
Value of bees on hand.....		7,389	00
Pounds of honey produced in 1899.....		32,640	
Pounds of wax produced in 1899.....		850	

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$463,547 00
Animals slaughtered	183,962 00
	<hr/>
Total	\$647,509 00

LIVE STOCK ON HAND.

Cattle	21,365	Horses	10,237
Sheep	23,159	Mules	7,239
Hogs	47,398	Asses and burros	1,048

WEST TENNESSEE.

BENTON COUNTY.

Population in 1900, 11,888; population in 1890, 11,230. This county has an area of 412 square miles, and is bounded on the east by the Tennessee River; on the northwest, by the Big Sandy River. Considerable forests of timber are still to be found in the county, consisting largely of oak, hickory, gum, cypress, and ash. The surface is level and generally fertile. The average price of improved land is about \$8 per acre; there is much unimproved land for sale in the county at an average price of \$3 per acre. There is an opportunity for the investment of capital in the timber business. The county is intersected by the Nashville, Chattanooga and St. Louis Railway.

Camden, the county seat, is located on the Nashville, Chattanooga and St. Louis Railway, 87 miles west of Nashville. It has good schools, churches, a weekly newspaper, a bank, and a number of flourishing mercantile establishments. Its population in 1900 was 399.

Number of manufacturing establishments in the county, 35; capital employed, \$66,666; amount of wages paid during the year, \$10,420; number of farms, 1,916; number of acres, 204,047; number of acres improved, 70,420; value of buildings, \$294,930; value of farming implements and machinery, \$77,710; value of live stock, \$444,690; value of products not fed to live stock, \$600,840; amount paid for farm labor during the year, \$10,570; total value of land and improvements, except buildings, \$876,720.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	625,450	Grains cut green for hay	3,690
Wheat	16,860	Other forage crops . . .	242
Oats	9,270	Sorghum sirup (gallons)	15,785
Other cereals	10	Cotton (bales)	428
Potatoes	10,488	Tobacco (pounds) . . .	114,760
Sweet potatoes	341	Broom corn (pounds) . .	50
Onions	1,031	Dried fruits (pounds) . .	6,050
Beans	126	Grapes (pounds)	40,515
Peas	3,507	Wine (gallons)	19
Value other vegetables .	\$26,420	Cider (barrels)	118
Peanuts	148,378	Vinegar (barrels)	79
Apples	13,684		
Cherries	92		
Peaches	220		
Pears	200		
Plums and prunes . . .	251		
	TONS		
Wild grasses	8		
Millet	1,001		
Clover	87		
Other cultivated grasses	420		

NUMBER OF FRUIT TREES.

Apple	38,003
Cherry	3,369
Peach	32,720
Pear	1,435
Plum and prune	4,138
Grapevines	10,397

Value forest products .	\$116,191
Value of small fruits . .	861

POULTRY AND BEES.

Value of poultry on hand.....	\$ 17,393 00
Value of poultry raised in 1899.....	28,559 00
Dozens of eggs produced in 1899.....	329,390
Value of bees on hand.....	4,254 00
Pounds of honey produced in 1899.....	18,180
Pounds of wax produced in 1899.....	1,260

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 47,954 00
Animals slaughtered	67,478 00
Total	\$115,432 00

LIVE STOCK ON HAND.

Cattle	6,554	Horses	2,050
Sheep	3,330	Mules	2,360
Hogs	10,117	Asses and burros	38

CARROLL COUNTY.

Population in 1900, 24,250; population in 1890, 23,630. This county has an area of 600 square miles, and is intersected by the Big Sandy River and drained by the South Fork of the Obion River. Its surface is generally level, and there are considerable quantities of timber still left in the county, consisting of oak, hickory, poplar, and chestnut. The western half of the county has fine farming lands, while the eastern part is hilly, with good lands in the creek and river bottoms. The average price of improved land is about \$12 per acre; unimproved land, about \$5 per acre. Corn, cotton, wheat, pork, oats, and fruits are the staple products. Fruit growing and poultry raising are profitable industries in portions of the county, especially in the vicinity of the flourishing towns of McKenzie and Trezevant.

Huntingdon, the county seat, is situated on the Nashville, Chattanooga and St. Louis Railway. The Southern Normal University is situated at this place. The town has two newspapers, good schools, a bank, water-works, electric lights, telephones, various churches, and good hotel accommodations. It has a number of flourishing mercantile establishments. Its population in 1900 was 1,332.

McKenzie, located at the intersection of the Nashville, Chattanooga and St. Louis Railway and the Louisville and Nashville Railroad, is quite an educational center. Bethel College is located at this point. There are excellent public and private schools, with churches of various denominations, a bank, a newspaper, and numerous prosperous mercantile establishments.

The average assessed value of land in 1900 was \$6 per acre.

Number of manufacturing establishments in the county, 91; capital employed, \$246,531; amount of wages paid during the year, \$47,301; number of farms, 3,785; num-

ber of acres, 320,326; number of acres improved, 173,287; value of buildings, \$738,340; value of farming implements and machinery, \$227,620; value of live stock, \$907,579; value of products not fed to live stock, \$1,278,611; amount paid for farm labor during the year, \$32,940; total value of land and improvements, except buildings, \$1,977,500.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS		TONS.
Corn	1,161,130	Other forage crops . . .	1,746
Wheat	105,889	Sorghum cane sold . . .	8
Oats	12,590		
Other cereals	470	Sorghum sirup (gallons)	42,902
Potatoes	6,506	Cotton (bales)	6,571
Sweet potatoes	24,029	Tobacco (pounds) . . .	85,020
Onions	553	Broom corn (pounds) . .	3,020
Beans	128	Dried fruits (pounds) . .	2,240
Peas	31,861	Grapes (pounds)	35,945
Value other vegetables .	\$41,764	Wine (gallons)	177
Peanuts	2,812	Cider (barrels)	238
Apples	28,740	Vinegar (barrels)	126
Cherries	232		
Peaches	91		
Pears	279		
Plums and prunes . . .	1,993		
	TONS.		
Wild grasses	37		
Millet	99		
Clover	410		
Other cultivated grasses	1,005		
Grains cut green for hay	8,214		

NUMBER OF FRUIT TREES.

Apple	66,275
Cherry	5,051
Peach	57,450
Pear	3,820
Plum and prune	8,209
Grapevines	5,077

Value forest products . \$102,673
Value of small fruits . . 9,389

POULTRY AND BEES.

Value of poultry on hand.....	\$ 40,417 00
Value of poultry raised in 1899.....	75,227 00
Dozens of eggs produced in 1899.....	442,360
Value of bees on hand.....	4,529 00
Pounds of honey produced in 1899.....	21,390
Pounds of wax produced in 1899.....	1,160

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$107,427 00
Animals slaughtered	150,001 00
Total	\$257,428 00

LIVE STOCK ON HAND.

Cattle	12,849	Horses	5,313
Sheep	4,625	Mules	4,110
Hogs	33,668	Asses and burros	88

CHESTER COUNTY.

Population in 1900, 9,896; population in 1890, 9,069. This county is situated on the highlands of West Tennessee, in the southwestern part of the State. It has an area of 288 square miles. It is watered by the South Fork of Forked Deer River, which traverses the entire width of the county. It is intersected by the Mobile and Ohio Railroad, which gives it railroad facilities to all parts of the country. The soil is sandy and very fertile. All crops adapted to that section are grown, but cotton is the leading staple. Attention is being paid to fruit and vegetable culture. The county is well timbered, and tillable land ranges from \$6 to \$10 per acre. Several villages are situated in different parts of the county.

Henderson, the county seat, is located on the Mobile and Ohio Railroad, and is a flourishing town, noted for its educational facilities, hustling business men, and thrifty citizenship. It has two weekly newspapers, two banks, splendid schools and churches, several factories, and a number of mercantile establishments.

The average assessed value of land in 1900 was \$4.02 per acre.

Number of manufacturing establishments in the county, 43; capital employed, \$78,911; amount of wages paid during the year, \$21,217; number of farms, 1,603; number of acres, 152,148; number of acres improved, 55,270; value of buildings, \$251,350; value of farming implements and machinery, \$88,790; value of live stock, \$371,713; value of products not fed to live stock, \$532,162; amount paid for farm labor during the year, \$11,650; total value of land and improvements, except buildings, \$676,500.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	409,330	Grains cut green for hay	1,666
Wheat	16,880	Other forage crops . . .	1,428
Oats	14,860		
Other cereals	450	Sorghum sirup (gallons)	22,026
Potatoes	4,165	Cotton (bales)	3,985
Sweet potatoes	7,909	Tobacco (pounds) . . .	4,210
Onions	423	Broom corn (pounds) . .	2,340
Beans	110	Dried fruits (pounds) . .	760
Peas	6,498	Grapes (pounds)	20,228
Value other vegetables	\$15,864	Wine (gallons)	7
Peanuts	203	Cider (barrels)	14
Apples	5,617	Vinegar (barrels)	5
Cherries	39		
Peaches	14	NUMBER OF FRUIT TREES.	
Pears	118	Apple	18,314
Plums and prunes . . .	386	Cherry	606
		Peach	18,107
		Pear	633
		Plum and prune	924
		Grapevines	3,203
	TONS.		
Wild grasses	75	Value forest products . .	\$42,945
Millet	83	Value of small fruits . .	2,323
Clover	163		
Other cultivated grasses	767		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 13,954 00
Value of poultry raised in 1899.....	22,501 00
Dozens of eggs produced in 1899.....	225,180
Value of bees on hand.....	2,327 00
Pounds of honey produced in 1899.....	12,620
Pounds of wax produced in 1899.....	230

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 38,748 00
Animals slaughtered	65,192 00
	<hr/>
Total	\$103,940 00

LIVE STOCK ON HAND.

Cattle	5,771	Horses	2,177
Sheep	3,391	Mules	1,603
Hogs	14,129	Asses and burros	33

CROCKETT COUNTY.

Population in 1900, 15,867; population in 1890, 15,146. This county, situated about the center of West Tennessee, has an area of 275 square miles, is oblong in form, and is drained by the South Fork and the Middle Fork of Forked Deer River. Cypress Creek and Beech Creek run north across the east end of the county, and Big Black Creek runs northwesterly from Johnson's Grove to Chestnut Bluff. Along these rivers and creeks fine forests of red oak, white oak, gum, cypress, hickory, and ash timber still grow. The soil in the eastern portions of the county is sandy loam and sandy clay, peculiarly adapted to the production of fruits and vegetables. The soil in the middle and western portions of the county is very rich, and the land lies level. It is well adapted to the growing of wheat, oats, corn, potatoes, sorghum, and all grasses. The farms are small and usually owned by the occupants. The health of the people is good, and most of them are prosperous and happy.

Alamo, the county seat, is situated 6 miles from the Louisville and Nashville Railroad. It has a fine courthouse and jail, several stores, a bank, a newspaper, three churches, a good school, and several manufacturing establishments.

Bells is the largest town in the county, 70 miles from Memphis, on the Louisville and Nashville Railroad. It has a fine school, several churches, a bank, a newspaper, a good rolling mill, a sawmill, and several general stores and groceries.

Gadsden, a station on the Louisville and Nashville Railroad, 77 miles from Memphis, was first to engage in the production of fruits and vegetables, and is noted as a shipping point for these commodities. It has three churches, good schools, and several stores.

Crockett Mills has the largest rolling mill in the county.

Maury City, 7 miles west of Alamo, has a fine school,

several churches, a fine rolling mill, a sawmill, and several stores.

Friendship, 13 miles northwest of Alamo, has three churches, good schools, and a fine mill.

Chestnut Bluff is a small town, 13 miles west of Alamo, and has several business houses, two churches, a good school, and is surrounded by very fertile soil and progressive people.

The average price of improved land is \$12.50 per acre. There is but little unimproved land in the county; this is generally in the lowlands along the river. There are opportunities for profitable investments in timber.

The average assessed value of land in 1900 was \$7.16 per acre.

Number of manufacturing establishments in the county, 54; capital employed, \$112,945; amount of wages paid during the year, \$17,081; number of farms, 2,567; number of acres, 151,499; number of acres improved, 97,184; value of buildings, \$648,600; value of farming implements and machinery, \$202,070; value of live stock, \$754,131; value of products not fed to live stock, \$1,009,796; amount paid for farm labor during the year, \$35,810; total value of land and improvements, except buildings, \$1,465,680.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	816,176	Grains cut green for hay . . .	2,337
Wheat	80,790	Other forage crops . . .	2,224
Oats	21,830	Sorghum cane sold . . .	534
Other cereals	70		
Potatoes	17,291	Sorghum sirup (gallons) . . .	20,725
Sweet potatoes	17,138	Cotton (bales)	6,335
Onions	1,448	Tobacco (pounds)	11,180
Beans	614	Brcom corn (pounds) . . .	5,510
Peas	13,897	Dried fruits (pounds) . . .	530
Value other vegetables . . .	\$47,257	Grapes (pounds)	5,600
Clover seed	55	Wine (gallons)	11
Peanuts	236	Cider (barrels)	28
Apples	9,663	Vinegar (barrels)	10
Cherries	8		
Peaches	98		
Pears	63		
Plums and prunes	1,385		
	TONS.		
Wild grasses	13		
Millet	608		
Clover	523		
Other cultivated grasses . . .	3,617		

NUMBER OF FRUIT TREES.

Apple	41,884
Cherry	1,555
Peach	29,333
Pear	1,158
Plum and prune	11,729
Grapevines	921

Value forest products . . .	\$49,251
Value of small fruits . . .	35,174

POULTRY AND BEES.

Value of poultry on hand	\$ 30,019 00
Value of poultry raised in 1899	53,208 00
Dozens of eggs produced in 1899	379,190
Value of bees on hand	2,386 00
Pounds of honey produced in 1899	14,580
Pounds of wax produced in 1899	840

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$103,464 00
Animals slaughtered	107,169 00
Total	\$210,633 00

LIVE STOCK ON HAND.

Cattle	11,637	Horses	5,205
Sheep	2,426	Mules	2,359
Hogs	26,196	Asses and burros	91

DECATUR COUNTY.

Population in 1900, 10,439; population in 1890, 8,995. This county has an area of 310 square miles, and is bounded on the east and south by the Tennessee River and intersected by Beech Creek. The surface is comparatively level, and is covered with a fine growth of timber. Some of the finest iron ore in the State is found in this county. There is a large deposit of high-grade phosphate rock in paying quantities in shipping distance of the railroad; also numerous deposits of coal, kaolin, etc. Phosphate is being mined and shipped by rail. Marble and granite abound in several localities in paying quantities. There are also deposits of both red and yell w ocher, and some indications of lead. Corn, cotton, and hogs are the staple products. There are some fine stock farms in the county, and a large part of the land is well adapted to the growth of timber. The average price of improved land is from \$10 to \$30 per acre; there is considerable unimproved land in the county at from \$5 to \$10 per acre.

Decaturville, the county seat, is located 5 miles west of the Tennessee River and 5 miles south of the Nashville, Chattanooga and St. Louis Railway. It has churches, schools, one bank, and a weekly newspaper.

Parsons is the principal business point on the railroad.

The average assessed value of land in 1900 was \$3.49 per acre.

Number of manufacturing establishments in the county, 38; capital employed, \$75,661; amount of wages paid during the year, \$13,948; number of farms, 1,819; number of acres, 180,457; number of acres improved, 57,091; value of buildings, \$245,040; value of farming implements and machinery, \$76,450; value of live stock, \$376,280; value of products not fed to live stock, \$601,808; amount paid for farm labor during the year, \$16,810;

total value of land and improvements, except buildings,
\$918,970.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	634,920	Other forage crops . . .	112
Wheat	13,040	Sorghum cane sold . . .	6
Oats	5,550		
Potatoes	7,009	Sorghum sirup (gallons)	19,438
Sweet potatoes	7,280	Cotton (bales)	1,688
Onions	1,325	Tobacco (pounds) . . .	3,450
Beans	126	Broom corn (pounds) . .	2,140
Peas	4,556	Dried fruits (pounds) . .	2,850
Value other vegetables .	\$25,648	Grapes (pounds)	22,030
Clover seed	3	Wine (gallons)	11
Peanuts	77,962	Cider (barrels)	33
Apples	15,811	Vinegar (barrels)	24
Cherries	26		
Peaches	2,915		
Pears	110		
Plums and prunes . . .	1,604		
	TONS.		
Wild grasses	8		
Millet	201		
Clover	121		
Other cultivated grasses	579		
Grains cut green for hay	955		

NUMBER OF FRUIT TREES.

Apple	25,995
Cherry	963
Peach	30,578
Pear	1,083
Plum and prune	21,726
Grapevines	1,033
Value forest products . .	\$67,132
Value of small fruits . .	230

POULTRY AND BEES.

Value of poultry on hand.....	\$ 13,995 00
Value of poultry raised in 1899.....	25,761 00
Dozens of eggs produced in 1899.....	235,170
Value of bees on hand.....	3,029 00
Pounds of honey produced in 1899.....	12,050
Pounds of wax produced in 1899.....	690

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 55,043 00
Animals slaughtered	71,816 00
Total	\$126,859 00

LIVE STOCK ON HAND.

Cattle	5,161	Horses	1,736
Sheep	2,889	Mules	2,052
Hogs	19,640	Asses and burros	28

DYER COUNTY.

Population in 1900, 23,776; population in 1890, 19,878. This county has an area of 495 square miles, and is bounded on the west by the Mississippi River. It is watered by five rivers and numerous creeks. It is hilly, rolling, and level, and is one of the most fertile counties in the State. It is well adapted to the growth of cereals, cotton, tubers, and almost any other crop growing in the State. The climate is healthful, and it is a desirable country in which to reside. There is considerable timber in the county. There are fine grazing lands for cattle and stock. The Illinois Central Railroad runs through the county. It has numerous churches, good schools, and rich lands adapted to the raising of all kinds of crops. It has an abundant supply of water, and is a splendid stock country. The staple products are corn, cotton, tobacco, pork, wheat, potatoes, hay, and lumber. The opportunities for investment in manufacturing from hardwood are excellent. The price of improved land ranges from \$10 to \$50 per acre; the average price of unimproved land varies from \$6 to \$25 per acre.

Dyersburg, the county seat, is situated on the Forked Deer River at the intersection of the river and the railroad, 76 miles north of Memphis. It is a manufacturing town. Its population in 1900 was 3,647; it is now estimated to be 4,500. It has churches, good schools, banks, two weekly newspapers, and all the appurtenances of a prosperous, growing town.

The average assessed value of land in 1900 was \$8.11 per acre.

Number of manufacturing establishments in the county, 70; capital employed, \$746,213; amount of wages paid during the year, \$154,183; number of farms, 2,861; number of acres, 212,214; number of acres improved, 125,576; value of buildings, \$864,810; value of farming implements and machinery, \$249,170; value of live stock,

\$1,063,128; value of products not fed to live stock, \$1,340,453; amount paid for farm labor during the year, \$60,290; total value of land and improvements, except buildings, \$3,108,570.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,449,000	Grains cut green for hay . . .	1,939
Wheat	337,290	Other forage crops . . .	893
Oats	31,660	Sorghum cane sold . . .	88
Other cereals	390		
Potatoes	10,780	Sorghum sirup (gallons) . . .	13,269
Sweet potatoes	11,795	Cotton (bales)	8,526
Onions	413	Tobacco (pounds)	282,820
Beans	185	Broom corn (pounds) . . .	750
Peas	2,059	Grapes (pounds)	14,685
Value other vegetables . . .	\$33,628	Wine (gallons)	14
Clover seed	115	Cider (barrels)	2
Peanuts	616	Vinegar (barrels)	2
Apples	1,629		
Cherries	10	NUMBER OF FRUIT TREES.	
Peaches	23	Apple	26,142
Pears	170	Cherry	570
Plums and prunes	270	Peach	22,217
		Pear	1,253
		Plum and prune	1,991
		Grapevines	3,216
	TONS.		
Wild grasses	4	Value forest products . . .	\$75,053
Millet	69	Value of small fruits . . .	1,371
Clover	4,142		
Other cultivated grasses . . .	2,220		

POULTRY AND BEES.

Value of poultry on hand	\$ 41,253 00
Value of poultry raised in 1899	57,113 00
Dozens of eggs produced in 1899	423,700
Value of bees on hand	3,012 00
Pounds of honey produced in 1899	15,200
Pounds of wax produced in 1899	750

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$166,241 00
Animals slaughtered	11,755 00
Total	\$177,996 00

LIVE STOCK ON HAND.

Cattle	19,478	Horses	5,923
Sheep	2,730	Mules	4,155
Hogs	30,577	Asses and burros	89

FAYETTE COUNTY.

Population in 1900, 29,701; population in 1890, 28,878. This county borders on the State of Mississippi, and has an area of 630 square miles. It is drained by the Loosahatchie River and the Wolf River. The surface is generally level and in many localities well timbered. Before the Civil War this was one of the leading cotton-growing counties in the South, and that is still the staple product of the county. It is well adapted to the growth of fruit, being one of the best strawberry counties in the South. The soil is very fertile. Cotton, corn, fruit, and pork are the staple products. The average price of improved land ranges from \$10 to \$15 per acre. Much of the land, which has been exhausted in the cultivation of cotton, can be bought at a reasonable price and easily restored. Stock raising in this county can be made a profitable business in conjunction with the restoration of this land. The Nashville, Chattanooga and St. Louis Railway; the Southern Railway; and the Louisville and Nashville Railroad traverse the county.

Somerville, the county seat, is located on the Loosahatchie River. It has fine schools, good churches, banks, two weekly newspapers, numerous mercantile establishments, and is surrounded by rich cotton plantations. Its population in 1900 was 777.

The average assessed value of land in 1900 was \$5.89 per acre.

Number of manufacturing establishments in the county, 52; capital employed, \$90,579; amount of wages paid during the year, \$14,358; number of farms, 4,886; number of acres, 380,121; number of acres improved, 205,741; value of buildings, \$821,110; value of farming implements and machinery, \$237,590; value of live stock, \$1,035,548; value of products not fed to live stock, \$1,816,226; amount paid for farm labor during the year,

\$59,120; total value of land and improvements, except buildings, \$2,475,680.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	846,030	Other forage crops . . .	2,573
Wheat	2,320	Sorghum cane sold . . .	210
Oats	13,260		
Other cereals	52	Sorghum sirup (gallons)	37,132
Potatoes	13,376	Cotton (bales)	25,881
Sweet potatoes	24,675	Tobacco (pounds) . . .	3,690
Onions	1,169	Broom corn (pounds) . .	15,900
Beans	252	Dried fruits (pounds) . .	170
Peas	20,772	Grapes (pounds)	22,929
Value other vegetables .	\$52,586	Wine (gallons)	119
Peanuts	87	Cider (barrels)	22
Apples	7,192	Vinegar (barrels)	20
Cherries	249		
Peaches	9,062		
Pears	514		
Plums and prunes . . .	4,613		
	TONS.		
Wild grasses	706		
Millet	97		
Clover	61		
Other cultivated grasses	2,544		
Grains cut green for hay	2,774		

NUMBER OF FRUIT TREES.

Apple	22,563
Cherry	1,914
Peach	49,351
Pear	4,335
Plum and prune	11,844
Grapevines	2,343
Value forest products . .	\$30,898
Value of small fruits . .	1,341

POULTRY AND BEES.

Value of poultry on hand.....	\$ 37,218 00
Value of poultry raised in 1899.....	58,477 00
Dozens of eggs produced in 1899.....	493,360
Value of bees on hand.....	1,833 00
Pounds of honey produced in 1899.....	10,560
Pounds of wax produced in 1899.....	530

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 64,512 00
Animals slaughtered	129,881 00
Total	\$194,393 00

LIVE STOCK ON HAND.

Cattle	17,908	Horses	6,458
Sheep	2,048	Mules	5,134
Hogs	30,753	Asses and burros	35

GIBSON COUNTY.

Population in 1900, 39,408; population in 1890, 35,859. This county has an area of 615 square miles. It is traversed by the Obion River and the Forked Deer River. Its surface is generally level, and it has a plentiful supply of timber—cypress, gum, oak, hickory, and tulip. Its soil is very fertile. The shipping facilities of the county are excellent. Cotton, corn, wheat, grass, fruits, vegetables, and hogs are the staple products.

Trenton, the county seat, is situated on the Forked Deer River and the Mobile and Ohio Railroad. It has one of the finest courthouses in the State, a number of manufacturing establishments, good schools, churches, banks, and flourishing mercantile establishments. The population of the town in 1900 was 2,238.

Among the number of prosperous towns in this county is Humboldt, with a population of 3,800, which is the center of the fruit-growing and vegetable-growing section. There were shipped from this point 297 car loads of tomatoes during the year 1902. Strawberries, apples, peaches, and other fruits, as well as vegetables, are grown and shipped in large quantities in this section. Humboldt is a considerable manufacturing town, with excellent school facilities, good churches, a bank, a weekly newspaper, and other appurtenances of a prosperous town. It is located at the intersection of the Mobile and Ohio Railroad and the Louisville and Nashville Railroad.

Milan, which has a population of 1,682, has two weekly newspapers, a bank, good schools and churches, and numerous manufacturing establishments. It is located at the intersection of the Louisville and Nashville Railroad and the Illinois Central Railroad.

Dyer, with a population of 1,204, is located on the Mobile and Ohio Railroad. It has a bank, a weekly newspaper, good schools and churches, and is one of the most flourishing towns in the county.

Portland, Rutherford, Bradford, Medina, Gibson, Brazil, Eaton, Neboville, and Laneview are important towns in this county.

The average assessed value of land in 1900 was \$9.31 per acre.

Number of manufacturing establishments in the county, 153; capital employed, \$773,381; amount of wages paid during the year, \$282,872; number of farms, 5,486; number of acres, 354,011; number of acres improved, 234,310; value of buildings, \$1,504,500; value of farming implements and machinery, \$439,810; value of live stock, \$1,483,954; value of products not fed to live stock, \$2,319,961; amount paid for farm labor during the year, \$86,760; total value of land and improvements, except buildings, \$4,233,760.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,988,480	Grains cut green for hay	7,580
Wheat	366,660	Other forage crops . . .	1,165
Oats	23,290	Sorghum cane sold . . .	676
Other cereals	60		
Potatoes	25,532	Sorghum sirup (gallons)	39,328
Sweet potatoes	30,678	Cotton (bales)	8,864
Onions	1,542	Tobacco (pounds) . . .	29,060
Beans	1,006	Broom corn (pounds) . .	4,950
Peas	47,016	Dried fruits (pounds) . .	430
Value other vegetables.	\$124,876	Grapes (pounds)	37,839
Clover seed	36	Wine (gallons)	482
Peanuts	1,602	Cider (barrels)	42
Apples	11,231	Vinegar (barrels)	16
Cherries	148		
Peaches	183		
Pears	294		
Plums and prunes	2,567		
	TONS.		
Wild grasses	54		
Millet	115		
Clover	2,233		
Other cultivated grasses	9,657		

NUMBER OF FRUIT TREES.

Apple	73,934
Cherry	3,856
Peach	51,054
Pear	6,784
Plum and prune	26,695
Grapevines	10,455
Value forest products .	\$ 92,039
Value of small fruits .	127,696

POULTRY AND BEES.

Value of poultry on hand.....	\$ 63,315 00
Value of poultry raised in 1899.....	154,524 00
Dozens of eggs produced in 1899.....	695,900
Value of bees on hand.....	5,213 00
Pounds of honey produced in 1899.....	32,320
Pounds of wax produced in 1899....	1,110

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$226,672 00
Animals slaughtered	215,152 00
Total	\$441,824 00

LIVE STOCK ON HAND.

Cattle	21,152	Horses	10,769
Sheep	4,373	Mules	5,469
Hogs	46,657	Asses and burros . . .	124

HARDEMAN COUNTY.

Population in 1900, 22,976; population in 1890, 21,029. This county borders on Mississippi, and has an area of 640 square miles. It is drained by the Big Hatchie River. Its surface is nearly level and in many localities covered with fine timber. The soil is very fertile, and it is one of the best cotton-producing counties in the State. The staple products are cotton, corn, hay, coal, and timber. The county is intersected by the Illinois Central Railroad; the Southern Railway; and the Nashville, Chattanooga and St. Louis Railway.

Bolivar, the county seat, is situated on the Big Hatchie River and the Illinois Central Railroad, 18 miles south of Jackson. The Hospital for the Insane of the western division is located near Bolivar. The town has churches, manufacturing establishments, two weekly newspapers, good schools, and banks. The population of the town in 1900 was 1,035.

The average assessed value of land in 1900 was \$4.07 per acre.

Number of manufacturing establishments in the county.

69; capital employed, \$111,920; amount of wages paid during the year, \$45,679; number of farms, 3,296; number of acres, 348,521; number of acres improved, 130,594; value of buildings, \$641,410; value of farming implements and machinery, \$176,390; value of live stock, \$768,563; value of products not fed to live stock, \$1,289,555; amount paid for farm labor during the year, \$10,440; total value of land and improvements, except buildings, \$1,565,240.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	770,590	Other forage crops . . .	1,437
Wheat	10,580	Sorghum cane sold . . .	508
Oats	9,930	Sorghum sirup (gallons)	33,984
Other cereals	250	Cotton (bales)	13,197
Potatoes	9,867	Tobacco (pounds)	2,620
Sweet potatoes	15,934	Broom corn (pounds) . .	3,420
Onions	688	Dried fruits (pounds) . .	920
Beans	166	Grapes (pounds)	25,367
Peas	15,110	Wine (gallons)	107
Value other vegetables .	\$44,009	Cider (barrels)	27
Apples	10,345	Vinegar (barrels)	18
Cherries	116		
Peaches	1,164		
Pears	611		
Plums and prunes . . .	1,303		
	TONS.		
Wild grasses	184		
Millet	122		
Clover	256		
Other cultivated grasses	2,413		
Grains cut green for hay	1,865		

NUMBER OF FRUIT TREES.

Apple	29,906
Cherry	269
Peach	49,708
Pear	4,062
Plum and prune	17,034
Grapevines	4,379
Value forest products .	\$113,914
Value of small fruits . .	5,592

POULTRY AND BEES.

Value of poultry on hand	\$ 27,659 00
Value of poultry raised in 1899	46,392 00
Dozens of eggs produced in 1899	335,720
Value of bees on hand	3,511 00
Pounds of honey produced in 1899	19,670
Pounds of wax produced in 1899	560

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$ 49,655 00
Animals slaughtered	108,382 00
Total	\$158,037 00

LIVE STOCK ON HAND.

Cattle	14,721	Horses	4,793
Sheep	6,095	Mules	3,175
Hogs	29,098	Asses and burros	59

HARDIN COUNTY.

Population in 1900, 19,246; population in 1890, 17,698. This county borders on Alabama and Mississippi, and is intersected by the Tennessee River, which passes through the county from south to north and is navigable all the year around. The western portion of the county is generally level, while the eastern portion is hilly, with many fertile valleys. Forests abound in the eastern part, consisting of oak, hickory, poplar, yellow pine, ash, red gum, beech, elm, and cypress. The staple products are corn, cotton, hogs, and cattle.

At Savannah, the county seat, is located the Savannah Institute. The institute building is one of the finest school buildings in the State. Savannah is located on the eastern bank of the Tennessee River. It has a weekly newspaper, a bank, good church and school buildings, good public and private schools, and numerous mercantile establishments.

Shiloh, one of the most noted battlefields of the Civil War, is in this county, 8 miles south of Savannah, at Pittsburg Landing, on the Tennessee River. Congress has established a national park at this place, covering 2,000 acres, which is being improved.

The average price of improved land is \$15 per acre; there is considerable unimproved land at from \$1 to \$2.50 per acre. The timber lands offer opportunities for profitable investment; the low price of land, educational advantages, healthfulness of the climate, and the abundant supply of pure water offer special inducements to home seekers.

The average assessed value of land in 1900 was \$4.20 per acre.

Number of manufacturing establishments in the county, 64; capital employed, \$122,549; amount of wages paid during the year, \$27,982; number of farms, 3,024; num-

HAYWOOD COUNTY.

Population in 1900, 25,189; population in 1890, 23,558. This county has an area of 570 square miles, and is intersected by the Hatchie River and the Forked Deer River. Its surface is nearly level, and there is an abundant supply of timber. It is a fine cotton-growing county. The soil is fertile and capable of great diversification of crops. Fruit growing is a profitable business in the county. The staple products are fruit, corn, cotton, grass, and hogs. The Louisville and Nashville Railroad traverses the county.

Brownsville, the county seat, is situated about 56 miles northeast of Memphis, on the Louisville and Nashville Railroad. It is a wide-awake and progressive town, with splendid schools, numerous churches, and considerable manufacturing establishments. It has two weekly newspapers, excellent banking facilities, and over 25,000 bales of cotton are shipped annually from this point. Its population in 1900 was 2,645.

The average assessed value of land in 1900 was \$6.12 per acre.

Number of manufacturing establishments in the county, 85; capital employed, \$294,547; amount of wages paid during the year, \$62,030; number of farms, 3,653; number of acres, 259,160; number of acres improved, 155,549; value of buildings, \$791,470; value of farming implements and machinery, \$222,430; value of live stock, \$941,602; value of products not fed to live stock, \$1,412,473; amount paid for farm labor during the year, \$42,640; total value of land and improvements, except buildings, \$2,157,470.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	802,040	Grains cut green for hay	4,192
Wheat	32,630	Other forage crops . . .	534
Oats	22,550	Sorghum cane sold . . .	5
Other cereals	100		
Potatoes	16,815	Sorghum sirup (gallons)	32,922
Sweet potatoes	13,897	Cotton (bales)	15,914
Onions	102	Tobacco (pounds)	2,990
Beans	270	Broom corn (pounds) . .	380
Peas	14,153	Dried fruits (pounds) . .	20
Value other vegetables	\$47,783	Grapes (pounds)	20,815
Clover seed	5	Wine (gallons)	22
Peanuts	108	Cider (barrels)	10
Apples	2,673	Vinegar (barrels)	6
Cherries	22		
Peaches	277	NUMBER OF FRUIT TREES.	
Pears	107	Apple	27,517
Plums and prunes	206	Cherry	1,200
		Peach	30,880
		Pear	2,238
		Plum and prune	6,113
		Grapevines	1,154
	TONS.		
Wild grasses	58	Value forest products	.\$84,610
Millet	103	Value of small fruits . .	832
Clover	380		
Other cultivated grasses	2,863		

POULTRY AND BEES.

Value of poultry on hand.....	\$ 28,880 00
Value of poultry raised in 1899.....	46,293 00
Dozens of eggs produced in 1899.....	392,580
Value of bees on hand.....	1,741 00
Pounds of honey produced in 1899.....	14,020
Pounds of wax produced in 1899.....	240

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 76,002 00
Animals slaughtered	110,459 00
	<hr/>
Total	\$186,461 00

LIVE STOCK ON HAND.

Cattle	15,550	Horses	5,929
Sheep	2,086	Mules	3,450
Hogs	23,953	Asses and burros	82

HENDERSON COUNTY.

Population in 1900, 18,117; population in 1890, 16,336. This county has an area of 530 square miles. It is drained by Beech Creek and Big Sandy River, both of which empty into the Tennessee River. The surface is generally level, and there are considerable forests of oak, beech, and gum in the county. The soil is very fertile, especially in the valleys and along the river bottoms. It is a fine county for cotton culture. The staple products are cotton, corn, grass, hogs, and mules. The average price of improved land is \$15 per acre; unimproved land, about \$5 per acre.

Lexington, the county seat, is situated near Beech River and on the Nashville, Chattanooga and St. Louis Railway, which traverses the county. It has churches, good schools, a fine electric light plant, a large stave factory, two newspapers, and a number of general stores. The population in 1900 was 1,332.

The average assessed value of land in 1900 was \$3.75 per acre.

Number of manufacturing establishments in the county, 72; capital employed, \$123,541; amount of wages paid during the year, \$28,814; number of farms, 3,008; number of acres, 298,990; number of acres improved, 109,876; value of buildings, \$362,370; value of farming implements and machinery, \$137,200; value of live stock, \$629,923; value of products not fed to live stock, \$986,203; amount paid for farm labor during the year, \$20,410; total value of land and improvements, except buildings, \$1,138,900.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	877,250	Other forage crops . . .	1,027
Wheat	26,910	Sorghum cane sold . . .	39
Oats	10,690		
Other cereals	60	Sorghum sirup (gallons)	32,304
Potatoes	7,465	Cotton (bales)	5,749
Sweet potatoes	18,512	Tobacco (pounds) . . .	13,500
Onions	1,406	Broom corn (pounds) . .	6,360
Beans	302	Dried fruits (pounds) . .	4,890
Peas	15,128	Grapes (pounds)	45,615
Value other vegetables .	\$33,724	Wine (gallons)	747
Peanuts	4,834	Cider (barrels)	58
Apples	20,211	Vinegar (barrels)	24
Cherries	146		
Peaches	120		
Pears	216		
Plums and prunes . . .	3,001		
	TONS.		
Wild grasses	9		
Millet	47		
Clover	535		
Other cultivated grasses	1,428		
Grains cut green for hay	3,399		

NUMBER OF FRUIT TREES.

Apple	58,226
Cherry	2,534
Peach	54,540
Pear	2,056
Plum and prune	36,538
Grapevines	6,372
Value forest products .	\$93,731
Value of small fruits . .	489

POULTRY AND BEES.

Value of poultry on hand.....	\$ 29,587 00
Value of poultry raised in 1899.....	48,293 00
Dozens of eggs produced in 1899.....	398,900
Value of bees on hand.....	3,982 00
Pounds of honey produced in 1899.....	19,060
Pounds of wax produced in 1899.....	960

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 70,927 00
Animals slaughtered	121,236 00
Total	\$192,163 00

LIVE STOCK ON HAND.

Cattle	9,267	Horses	3,172
Sheep	4,836	Mules	3,518
Hogs	28,448	Asses and burros	56

HENRY COUNTY.

Population in 1900, 24,208; population in 1890, 21,070. This county has an area of 580 square miles, and is bounded on the east by the Tennessee River, Big Sandy River, and Obion River; on the north, by the State of Kentucky. The surface is generally level, and has fine timber in many localities throughout the county. It has a rich, loamy soil, and is well adapted to diversified farming. The crops that grow well are cotton, corn, wheat, oats, fruit, sweet potatoes, Irish potatoes, clover, tomatoes, stock peas, sorghum, peanuts, broom corn, and all kinds of garden vegetables; also all the hardy large and small fruits. Market gardening and fruit culture are very profitable. The county is specially adapted to the raising and shipping of live stock, and large shipments are made throughout the year. The poultry business is also profitable. Considerable land is being exhausted by the cultivation of corn, cotton, and tobacco. These lands can be bought at a very low price, and can be easily restored by crops of peas and clover. The Louisville and Nashville Railroad and the Nashville, Chattanooga and St. Louis Railway intersect the county.

Paris, the county seat, is situated at the intersection of these railroads, and is one of the most progressive towns in West Tennessee. It had a population of 2,018 under the census of 1900, and it is estimated that there are over 2,000 people living in the suburbs outside the corporate limits. The Louisville and Nashville Railroad construction and repair shops have been located at this point, employing a large force, with a monthly pay roll amounting to \$30,000. Paris has churches of various denominations, first-class public and private schools, two weekly newspapers, two banks, fine hotels, and numerous mercantile establishments. It has an electric light plant, waterworks, and telephone connections with all points.

Improved land can be bought at \$10 per acre; un-

POULTRY AND BEES.

Value of poultry on hand.....	\$ 33,890 00
Value of poultry raised in 1899.....	58,085 00
Dozens of eggs produced in 1899.....	447,020
Value of bees on hand.....	4,643 00
Pounds of honey produced in 1899.....	22,200
Pounds of wax produced in 1899.....	840

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$167,187 00
Animals slaughtered	130,182 00
Total	\$297,369 00

LIVE STOCK ON HAND.

Cattle	12,759	Horses	5,712
Sheep	5,957	Mules	4,469
Hogs	35,270	Asses and burros . . .	127

LAKE COUNTY.

Population in 1900, 7,368; population in 1890, 5,304. This county, the most northwestern county in the State, has an area of 210 square miles. It is bounded on the west by the Mississippi River; on the east, by Reelfoot Lake, one of the most remarkable fresh-water bodies in America. The lake is 18 miles long and 7 miles in width. It is really a submerged forest formed during an earthquake in the year 1811. It is fed by the following creeks: Indian, Reelfoot, Pawpaw, and Brown's. The outlet is the Reelfoot River, which empties into the Obion River. The county is divided into two sections, the western half being level and high, above the overflow from the Mississippi River, and in an advanced state of cultivation; the southern half is more or less subject to overflow, and, therefore, not so well improved. A fine growth of gum, cottonwood, cypress, and oak is found in this section. The levee, already half completed, which will cost \$300,000, will redeem thousands of acres of land. The soil in the county is the richest in the State. Corn, cotton, and pork are the products. The hunting and fishing on the lake

are unsurpassed in America. The average price of improved land is from \$35 to \$40 per acre; unimproved land, \$12 per acre.

Tiptonville, the county seat, situated on the Mississippi River, has churches, schools, a weekly newspaper, and general stores.

The average assessed value of land in 1900 was \$9.04 per acre.

Number of manufacturing establishments in the county, 30; capital employed, \$263,083; amount of wages paid during the year, \$56,031; number of farms, 696; number of acres, 54,285; number of acres improved, 42,372; value of buildings, \$173,170; value of farming implements and machinery, \$44,350; value of live stock, \$290,525; value of products not fed to live stock, \$586,828; amount paid for farm labor during the year, \$98,640; total value of land and improvements, except buildings, \$1,301,080.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	368,940	Clover	507
Wheat	4,360	Other cultivated grasses	361
Oats	1,600		
Potatoes	2,219	Grains cut green for hay	171
Sweet potatoes	1,500	Other forage crops	13
Onions	2	Cotton (bales)	12,967
Peas	47	Tobacco (pounds)	3,000
Value other vegetables	\$2,644		
Peanuts	85		
Apples	1,660		
Peaches	20		
Pears	200		
Plums and prunes	5		
	TONS.		
Wild grasses	1		
Millet	38		

NUMBER OF FRUIT TREES.

Apple	1,497
Cherry	6
Peach	492
Pear	66
Plum and prune	184

Value forest products \$65

POULTRY AND BEES.

Value of poultry on hand.....	\$ 10,614 00
Value of poultry raised in 1899.....	11,305 00
Dozens of eggs produced in 1899.....	87,120
Value of bees on hand.....	416 00
Pounds of honey produced in 1899.....	3,330
Pounds of wax produced in 1899.....	90

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 18,133 00
Animals slaughtered	16,101 00
Total	\$ 34,234 00

LIVE STOCK ON HAND.

Cattle	4,628	Horses	872
Sheep	7	Mules	1,817
Hogs	10,056	Asses and burros	6

LAUDERDALE COUNTY.

Population in 1900, 21,971; population in 1890, 18,756. This county has an area of 450 square miles. It is bounded on the south by the Hatchie River; on the west, by the Mississippi River; and is drained by the Forked Deer River. The soil is very fertile. The surface is nearly level, with a good growth of timber. This is a large cotton-producing county. The staple products are cotton, corn, fruit, and pork. The average price of improved land ranges from \$15 to \$30 per acre; unimproved land, about \$10 to \$15 per acre. There are splendid opportunities for profitable investments in timber land in this county. The inducements which the county offers to home seekers are a healthful climate, a fine soil, churches of various denominations, good schools, splendid shipping facilities, reasonable price of land, and the high moral tone and respectable character of the people.

Ripley, the county seat, is located on the Illinois Central Railroad, 56 miles northeast of Memphis. It has good schools, churches, two weekly newspapers, good banking facilities, and general stores.

POULTRY AND BEES.

Value of poultry on hand.....	\$ 30,185 00
Value of poultry raised in 1899.....	36,069 00
Dozens of eggs produced in 1899.....	281,420
Value of bees on hand.....	2,439 00
Pounds of honey produced in 1899.....	13,300
Pounds of wax produced in 1899.....	610

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 87,935 00
Animals slaughtered	106,401 00
Total	<u>\$194,336 00</u>

LIVE STOCK ON HAND.

Cattle	13,636	Horses	4,551
Sheep	1,220	Mules	3,564
Hogs	25,332	Asses and burros	60

M'NAIRY COUNTY.

Population in 1900, 17,760; population in 1890, 15,510. This county has an area of 550 square miles, and is drained by the Hatchie River and small affluents of the Tennessee River. A considerable portion of the county is level, and in various portions there are fine growths of timber, consisting of ash, hickory, chestnut, oak, gum, and cypress. The staple products are cotton, corn, and pork. The Mobile and Ohio Railroad and the Southern Railway traverse the county.

Sehner, the county seat, is located on the Mobile and Ohio Railroad, 19 miles north of Corinth, Miss., and about 35 miles south of Jackson, Tenn. It has a bank, two weekly newspapers, good schools, churches, mills, lumber-manufacturing establishments, and general stores. Its population in 1900 was 588.

Adamsville, Stantonville, and Bethel Springs are flourishing towns in the county.

The average assessed value of land in 1900 was \$3.15 per acre.

Number of manufacturing establishments in the county, 64; capital employed, \$112,063; amount of wages paid during the year, \$17,650; number of farms, 3,012; number of acres, 291,422; number of acres improved, 87,743; value of buildings, \$379,120; value of farming implements and machinery, \$123,670; value of live stock, \$637,497; value of products not fed to live stock, \$941,565; amount paid for farm labor during the year, \$15,470; total value of land and improvements, except buildings, \$1,065,020.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 28,422 00
Value of poultry raised in 1899.....	42,926 00
Dozers of eggs produced in 1899.....	397,310
Value of bees on hand.....	4,147 00
Pounds of honey produced in 1899.....	21,150
Pounds of wax produced in 1899.....	690

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 56,758 00
Animals slaughtered	100,432 00
Total	\$157,190 00

LIVE STOCK ON HAND.

Cattle	11,292	Horses	3,896
Sheep	8,376	Mules	2,727
Hogs	24,720	Asses and burros	60

MADISON COUNTY.

Population in 1900, 36,333; population in 1890, 30,497. This county has an area of 520 square miles, and is intersected by Forked Deer River. Its surface is generally level. Hickory, oak, ash, beech, walnut, sycamore, and poplar constitute the forest growth. The soil is very fertile. The staple products are corn, cotton, fruits, cattle, and hogs. The Illinois Central Railroad; the Mobile and Ohio Railroad; and the Nashville, Chattanooga and St. Louis Railway traverse the county. A large cotton-manufacturing establishment has been erected at Bemis, 2 miles south of Jackson, on the Illinois Central Railroad, at a cost of \$400,000, to which \$50,000 in new machinery has recently been added; and a considerable manufacturing town has grown up around it, giving employment to a large number of persons.

Jackson, the county seat, is located at the intersection of the three above-mentioned railroads, and is the fifth largest city in population in the State. Under the census of 1900 the population was 14,507, and there has been a steady growth since that time, which justifies the claim

that there are between 18,000 and 20,000 inhabitants in the corporation and in the suburbs outside the corporate limits. This city has all the public improvements that go to make a live and prosperous city. The waterworks, owned by the city and supplied by artesian wells, furnish an unlimited supply of the purest water. The city owns its own electric light plant. The street railway owns an electric light plant and gas works, and operates its cars by electricity. The city has splendid public schools, equal to any in the State, and fine graveled streets. The Southwestern Baptist University is located at this place; also the Memphis Conference Female Institute, St. Mary's Catholic School, and Lane College (for the education of the colored). Jackson has the best boiler works plant in the State, the largest skewer factory in America, and a large number of other thriving establishments, among which may be mentioned the Southern Seating and Cabinet Company, a large spoke factory, the Jackson Oil Mills, a large heading factory, a cotton compress, several ice-manufacturing establishments, and the Jackson Woolen Mills. The shops of the Mobile and Ohio Railroad and the repair shops of the Illinois Central Railroad are located at this point. Jackson has four banks, two daily newspapers, one political weekly, and other publications. There are fine churches of the various denominations. The Carnegie-Free Library has recently been erected, also a branch of the Armour Packing Company. A movement has recently been inaugurated between the Commercial Club and the farmers in the surrounding country to increase the production of small fruits and vegetables in the county to supply the local demand and to ship to other markets. Considerable additions are being made to the manufacturing interests of the city, and the population is steadily increasing.

The average assessed value of land in 1900 was \$6.22 per acre.

POULTRY AND BEES.

Value of poultry on hand.....	\$ 30,681 00
Value of poultry raised in 1899.....	53,802 00
Dozens of eggs produced in 1899.....	527,790
Value of bees on hand.....	2,835 00
Pounds of honey produced in 1899.....	14,060
Pounds of wax produced in 1899.....	870

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 76,274 00
Animals slaughtered	129,769 00
Total	<u>\$206,043 00</u>

LIVE STOCK ON HAND.

Cattle	14,717	Horses	6,192
Sheep	2,618	Mules	3,841
Hogs	27,151	Asses and burros	49

OBION COUNTY.

Population in 1900, 28,286; population in 1890, 27,273. This county has an area of 540 square miles. It is intersected by the Obion River, and is bounded on the west by Reelfoot Lake. It is one of the richest agricultural counties in the State. Its surface is nearly level, and has a plentiful supply of timber, such as ash, cypress, gum, hickory, oak, and poplar. The soil is rich and fertile. Wheat, corn, cotton, oats, cattle, and hogs are the staple products. It is among the best wheat-producing counties in the State. It is intersected by the Illinois Central Railroad; the Mobile and Ohio Railroad; and the Nashville, Chattanooga and St. Louis Railway.

Union City, the county seat, is located at the junction of these railroads, and is one of the most prosperous and thriving towns in West Tennessee. It has splendid churches, good schools, banks, weekly newspapers, and lumber mills, railroad shops, and other manufacturing establishments. Its population in 1900 was 3,407.

The average assessed value of land in 1900 was \$13.75 per acre.

Number of manufacturing establishments in the county.

99; capital employed, \$596,542; amount of wages paid during the year, \$147,364; number of farms, 3,192; number of acres, 304,879; number of acres improved, 186,788; value of buildings, \$1,264,270; value of farming implements and machinery, \$424,090; value of live stock, \$1,315,725; value of products not fed to live stock, \$1,943,905; amount paid for farm labor during the year, \$105,050; total value of land and improvements, except buildings, \$5,624,770.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,873,790	Grains cut green for hay . . .	3,558
Wheat	780,870	Other forage crops . . .	897
Oats	14,830	Sorghum cane sold . . .	57
Other cereals	224	Sorghum sirup (gallons) . .	9,161
Potatoes	12,008	Cotton (bales)	1,032
Sweet potatoes	10,764	Tobacco (pounds) . . .	1,822,200
Onions	1,044	Broom corn (pounds) . .	36,100
Beans	260	Dried fruits (pounds) . .	450
Peas	19,114	Grapes (pounds)	59,175
Value other vegetables . .	\$49,501	Wine (gallons)	180
Clover seed	51	Cider (barrels)	40
Peanuts	72	Vinegar (barrels)	13
Apples	12,823		
Cherries	94		
Peaches	204		
Pears	977		
Plums and prunes	1,584		
	TONS.		
Wild grasses	413		
Millet	127		
Clover	7,054		
Other cultivated grasses .	3,304		

NUMBER OF FRUIT TREES.

Apple	54,059
Cherry	1,682
Peach	29,435
Pear	3,324
Plum and prune	9,063
Grapevines	7,241
Value forest products . .	\$118,003
Value of small fruits . .	11,580

POULTRY AND BEES.

Value of poultry on hand	\$ 41,191 00
Value of poultry raised in 1899	67,621 00
Dozens of eggs produced in 1899	401,920
Value of bees on hand	6,031 00
Pounds of honey produced in 1899	23,530
Pounds of wax produced in 1899	1,050

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold	\$250,661 00
Animals slaughtered	126,595 00

Total \$377,256 00

LIVE STOCK ON HAND.

Cattle	18,302	Horses	7,702
Sheep	4,957	Mules	5,236
Hogs	47,923	Asses and burros	94

SHELBY COUNTY.

Population in 1900, 153,557; population in 1890, 112,740. This county has an area of 728 square miles. It is bounded on the west by the Mississippi River; on the south, by the State of Mississippi; and is intersected by the Loosahatchie River and Wolf River. Its surface is level, with forests of ash, elm, gum, oak, walnut, hickory, cypress, and other trees. The soil is very rich and fertile. It is one of the finest cotton-producing counties in the State. The staple products are cotton, corn, lumber, and pork. The land produces from 15 to 60 bushels of corn per acre, and the yield of cotton per acre is greater in this county than in any other county in the State. The strawberry industry is large and increasing. Market gardening is carried on extensively in the country around Memphis. The soil is especially adapted to all kinds of vegetables. Oats, wheat, corn, sorghum, red and white clover, and Bermuda and blue grass grow extensively in the county. The county is dotted with thriving towns, and the educational facilities throughout the county are unexcelled.

Memphis, the county seat, is the largest city in the State. It is located on the eastern bank of the Mississippi River, on the Chickasaw Bluff, just below the mouth of Wolf River, 420 miles below St. Louis and 209 miles southwest of Nashville. It is the most populous and important city between New Orleans and St. Louis. It has 100 miles of paved streets and 180 miles of sewers, the latter built since 1878 and 100 miles built within the past three years, the whole system costing \$1,100,000. There are 826 factories of various kinds in the city, employing 15,000 workmen at an average of \$12 per week, or \$180,000 per week for the whole, making a total of \$9,360,000 per annum. Between 35,000 and 40,000 people are sustained through the wage outlay of industrial enterprises of the city. The city covers an area of 16 square miles, and is bountifully supplied with water by an artesian

well system. The electric car system covers 100 miles, with 17 different lines. The company employs 500 men. There are twelve railroads entering the city, among the most important being the Illinois Central; the Yazoo and Mississippi Valley; the Choctaw, Oklahoma and Gulf; the Iron Mountain; the Frisco; the Kansas City, Memphis and Birmingham; the Louisville and Nashville; the Nashville, Chattanooga and St. Louis Railway; the Cotton Belt; the St. Louis, Memphis and Southeastern; and the Southern Railway. The navigation of the river is open the year around. Its shipping facilities have made Memphis one of the leading marts of the United States. The city is rapidly growing, and its business is expanding in every direction. Churches of all denominations are represented within its borders, and its schools and colleges furnish educational advantages unexcelled. Its enterprising newspapers herald its progress to the world. It has many beautiful private residences and splendid public buildings. The large manufacturing interests of the city are steadily growing. It is the leading cotton market of the South; it is also a leading lumber market. About 4,000 head of mules and horses were marketed there during 1900. It is the center of the cotton-seed oil industry in the South, and is the largest cotton-seed oil market in the world.

The average assessed value of land in 1900 was \$16.34 per acre.

The United States census for 1900 gives the following statistics of Shelby County: Number of manufacturing establishments in the county, 735; capital employed, \$11,480,781; amount of wages paid during the year, \$3,760,429; number of farms, 6,887; number of acres, 377,689; number of acres improved, 243,181; value of buildings, \$2,005,430; value of farming implements and machinery, \$432,500; value of live stock, \$1,549,000; value of products not fed to live stock, \$3,294,392; amount paid for farm labor during the year, \$243,160; total value of land and improvements, except buildings, \$6,245,940.

AGRICULTURAL PRODUCTS FOR 1899.

	BUSHELS.		TONS.
Corn	1,342,720	Other forage crops . . .	746
Wheat	8,860	Sorghum cane sold . . .	512
Oats	26,410		
Other cereals	470	Sorghum sirup (gallons)	12,581
Potatoes	149,220	Cotton (bales)	39,175
Sweet potatoes	140,575	Tobacco (pounds)	2,110
Onions	6,120	Broom corn (pounds) . .	2,320
Beans	398	Dried fruits (pounds) . .	320
Peas	25,840	Grapes (pounds)	49,839
Value other vegetables.	\$126,072	Wine (gallons)	263
Peanuts	478	Cider (barrels)	70
Apples	4,574	Vinegar (barrels)	65
Cherries	9		
Peaches	1,113		
Pears	634		
Plums and prunes . . .	332		
	TONS.		
Wild grasses	3		
Millet	159		
Clover	455		
Other cultivated grasses	4,084		
Grains cut green for hay	4,616		

NUMBER OF FRUIT TREES.

Apple	37,808
Cherry	1,062
Peach	46,489
Pear	5,896
Plum and prune	7,588
Grapevines	19,212
Value forest products	.\$56,091
Value of small fruits .	.\$13,742

POULTRY AND BEES.

Value of poultry on hand.....	\$ 66,013 00
Value of poultry raised in 1899.....	101,459 00
Dozens of eggs produced in 1899.....	636,100
Value of bees on hand.....	2,164 00
Pounds of honey produced in 1899.....	13,380
Pounds of wax produced in 1899.....	550

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 92,006 00
Animals slaughtered	161,870 00
Total . . . . .	.\$253,876 00

LIVE STOCK ON HAND.

Cattle	24,076	Horses	13,790
Sheep	3,642	Mules	8,437
Hogs	35,655	Asses and burros	90

TIPTON COUNTY.

Population in 1900, 29,273; population in 1890, 24,271. This county has an area of 400 square miles. It is bounded on the north by the Hatchie River; on the west, by the Mississippi River. The surface is level, except the range of hills near the Mississippi River. It is well covered with oak, gum, hickory, poplar, and cypress. It is well watered with running streams and artesian wells of moderate depth. The soil is rich. Cotton, corn, wheat, oats, fruit, vegetables, cattle, pork, and lumber are the products. The public schools are as good as the best. The Louisville and Nashville Railroad and the Illinois Central Railroad traverse the county. The average price of improved land is about \$20 per acre.

Covington, the county seat, is situated 38 miles north of Memphis, on the Illinois Central Railroad. The city has splendid public graded schools, which were awarded the silver medal at the Tennessee Centennial Exposition. It has nine church buildings of the various denominations, two banks, electric lights, waterworks, a \$100,000 cotton mill, a \$60,000 cotton-seed oil mill, a \$30,000 compress, a \$25,000 flouring mill, and other manufacturing establishments. It has two weekly newspapers, and is a live, progressive town. The population of the town in 1900 was 2,787, an increase of more than 150 per cent over 1890.

The average assessed value of land in 1900 was \$8.04 per acre.

Number of manufacturing establishments in the county, 59; capital employed, \$192,508; amount of wages paid during the year, \$23,585; number of farms, 4,168; number of acres, 244,561; number of acres improved, 155,956; value of buildings, \$1,011,940; value of farming implements and machinery, \$253,190; value of live stock, \$1,007,163; value of products not fed to live stock, \$1,889,057; amount paid for farm labor during the year,

\$76,610; total value of land and improvements, except buildings, \$2,752,630.

AGRICULTURAL PRODUCTS FOR 1899.

[illegible]

POULTRY AND BEES.

Value of poultry on hand.....	\$ 38,111 00
Value of poultry raised in 1899.....	66,285 00
Dozens of eggs produced in 1899.....	521,370
Value of bees on hand.....	3,678 00
Pounds of honey produced in 1899.....	16,630
Pounds of wax produced in 1899.....	880

VALUE OF ANIMAL PRODUCTS FOR 1899.

Live animals sold.....	\$ 96,178 00
Animals slaughtered	123,216 00
Total	\$219,394 00

LIVE STOCK ON HAND.

Cattle	16,575	Horses	6,968
Sheep	2,817	Mules	4,051
Hogs	30,418	Asses and burros	29

WEAKLEY COUNTY.

Population in 1900, 32,546; population in 1890, 28,955. This county borders on Kentucky, and has an area of 620 square miles. It is intersected by the Obion River. The timber, of which there is a considerable supply, is ash, beech, hickory, gum, oak, poplar, and cypress. The surface is generally level, and the soil is very fertile. It is a fine county for growing the long "staple" cotton; it is also a good tobacco-producing county. Corn, wheat, fruits, cotton, oats, tobacco, cattle, and hogs are the staple products. The Nashville, Chattanooga and St. Louis Railway and the Illinois Central Railroad traverse the county.

Dresden, the county seat, has good schools, churches, lumber mills, a spoke and stave factory, general stores, a tannery, a bank, and a weekly newspaper.

Martin is a prosperous town in this county, located at the crossing of the Illinois Central Railroad and the Nashville, Chattanooga and St. Louis Railway. It is a town of 1,730 inhabitants. It has thirty-five business houses, six leaf-tobacco firms, good schools and churches, several manufacturing establishments, good hotels, and newspapers.

Sharon and Greenfield are flourishing towns on the Illinois Central Railroad, with fine schools, churches, newspapers, and flourishing manufacturing and commercial interests.

The average assessed value of land in 1900 was \$10.01 per acre.

Number of manufacturing establishments in the county, 98; capital employed, \$471,471; amount of wages paid during the year, \$109,950; number of farms, 5,010; number of acres, 343,005; number of acres improved, 214,172; value of buildings, \$1,454,420; value of farming implements and machinery, \$422,670; value of live stock, \$1,365,647; value of products not fed to live stock, \$2,-

ERRATA.

Page 17, line 24, should read: "Total, 11,661,542."

Page 100, last item, "Live Stock on Hand," should read: "Cattle, 10,668; horses, 3,438; sheep, 5,125; mules, 1,515; hogs, 17,713; asses and burros, 26."

Page 114, line 28, should read: "It is near the Holston River."

Page 124, in line 18, should read: "Capital employed, \$6,182,808."

Page 132, in line 18, should read: "Acres, 124,819."

Page 151, in lines 15 and 16, should read: "Value of live stock, \$658,568."

Page 167, in lines 27, 28, and 29, should read: "Live animals sold, \$16,690; animals slaughtered, \$15,601. Total, \$92,291."

Page 167, last item, "Live Stock on Hand," should read: "Cattle, 3,832; horses, 1,710; sheep, 3,606; mules, 1,200; hogs, 14,380; asses and burros, 42."

Page 182, in line 22, should read: "Capital employed, \$334,793."

Page 225, in lines 2 and 3, should read: "This county, one of the largest tobacco-growing counties of Middle Tennessee," etc.

Page 235, in lines 17 and 18, should read: "Capital employed, \$906,792; amount of wages paid during the year, \$83,119."

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